



**STATE HIGHER EDUCATION COUNCIL [SHEC]  
MEGHALAYA ::: SHILLONG**

**MEGHALAYA ACT NO.3 OF 2018  
Vide Notification No. LL(B).78/2017/16, dated 27.04.2018**

**RATE OF CONTRACT**

1. Sealed ROC in a Two Bid System affixing a Court Fee Stamp of Rs. 5,000.00 (Rupees. Five Thousand) only is invited by the Office of the State Higher Education Council, Government of Meghalaya from eligible Suppliers/ Firms/Authorised Bidders for **Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya.**
2. This tender shall be evaluated under the Three bid system, i.e., through evaluation of pre-qualification, technical bid and Second bid - financial proposals/ bids. Along with submitting requisite documents in the technical bid.

Sr. No.	Particulars	Details
1	Tender Notice No	<b>No. SHEC/ROC/93/2025-26/1 Dated 17.11.2025</b>
2	Description of work	<b>Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya.</b>
3	Cost of Tender Document	<b>Rs. 10,000/- non-refundable, in the form of Demand Draft/Banker's Cheque in favour "State Higher Education Council, Meghalaya".</b>
4	Earnest Money Deposit	<b>Rs 5,00,000/- (Five Lakhs) have to be enclosed (refundable) with the tender in the form of Demand Draft/ Banker's Cheque in favor of "State Higher Education Council, Meghalaya"</b>
6	Date of Sale of Tender	<b>19<sup>th</sup> November 2025</b>
7	Last date for Sale of Tender Document	<b>09<sup>th</sup> December 2025 till 04:00pm</b>
8	Last date of submission of Tender Document	<b>09<sup>th</sup> December 2025 till 4:00pm</b>
9	Opening of Tenders (Pre-Qualification & Technical Bid)	<b>10<sup>th</sup> December 2025 at 05:00 pm</b>
10	Opening of Financial Bid (only for qualified bidders)	<b>To be notified later</b>

Copy of Rate of Contract documents may please be purchased from State Higher Education Council, Meghalaya on payment of ₹. 10,000/- and the Cost of Rate of Contract document along with EMD mentioned above may please be deposited in the form of 'demand draft 'pay order' in favour of 'State Higher Education Council', Payable at Shillong. Please write the name of company on the reverse side of the 'Demand Draft'/'Pay order'. Please note that the downloaded tender document is subject to verification with original document as given in the Website. The Commissioner & Secretary to the Govt. of Meghalaya, Education Department, Meghalaya reserves the right to reject any or all the tenders without assigning any reason.

**Note:** Any changes or any further notifications in respect to the above Tender document shall be made available only at the above-mentioned website. Hence respective vendors are advised to visit the website regularly for the above purpose.

**Sd/-**

Director of Higher & Technical Education &  
Dy. State Project Director, RUSA & PMUSHA,  
Meghalaya ::: Shillong



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### **1. Introduction:**

The aim of the State Higher Education Council has made a proposal for purchasing of furniture equipment for Educational Institutes in Meghalaya is to create better infrastructure and to provide better facilities for universal access to Higher Education within the state of Meghalaya. Another important objective is to improve the classroom facilities and good environment.

### **2. Tender Guidelines and Instructions to Bidders:**

#### **Definitions:**

PO – Purchase Order

Contract – Terms informed in the PO

EMD – Earnest Money Deposit

DD – Demand Draft

PBG – Performance Bank Guarantee

BC – Banker's Cheque

Purchaser – SHEC, Meghalaya

Tenderer – Bidders who have submitted Valid Tender Document

Supplier – Successful Bidder(s), to whom, the tender quantity is distributed to

Sample – One piece manufactured / Supplied by the bidder/ catalogue

Bidder – MANUFACTURER or Authorized Trading partner such as dealers / distributors/Suppliers

The prices quoted and quantities offered for supply in the tender shall remain open for acceptance - 90 days from the date of bid opening.

#### **General:**

- While every effort has been made to provide comprehensive and accurate background information and requirements and specifications, Bidders must form their own conclusions about the requirement. Bidders and recipients of this ROC may wish to consult their own legal advisers in relation to this ROC.
- All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by the SHEC on the basis of this ROC.
- This ROC supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

### **3. PERIOD OF CONTRACT:**

3 (Three) year rate contract (initially one year and extendable on satisfactory supply of Furniture Items and other Items).

### **4. Price Schedule:**

Rates shall be quoted as mentioned in Annexure-III. The rate will remain firm and fixed for all supply orders placed during the period of the contract.

### **5. Eligibility Criteria:**

- Annexure II, III, IV, V, VI, VII, VIII and IX should be duly filled and complete in all respects.
- Submission of EMD of Rs 5,00,000.00 (Five Lakhs) shall have to be enclosed (refundable) with the tender in the form of Demand Draft/ BG in favour "State Higher Education Council, Meghalaya. EMD should be valid for a period of 90 days as per Annexure-IX. The Bidder may participate in any one of the Category
- In case of dealer the bidder should submit a Dealership certificate from the Company and failing to meet the requirement shall be rejected.
- Bidder should be ISO certified.
- Standards and safety certificate.
- Manufacturer should have the following valid certifications: -

#### **A. Furniture Items:**

- MANUFACTURER (OEM) SHOULD BE AN ISO CERTIFIED ORGANIZATION.
- The bidder must submit following valid Certificates along with Bid :- ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, ISO 13485:2016 (All ISO Certifications By NABCB Certified), GREENGUARD BY UL (minimum 100 products should be listed in the



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official Link of Spot/UL), GREENGUARD GOLD, GREEN PRO, AIOTA (Office Furniture Range), AIOTA (Educational Furniture Range), AIOTA (Storage Furniture Range), AIOTA (Seating System Range),

3. Indoor Advantage™ Gold (Table & Seating), Indian Design Mark, GRIHA, GREENCO (CII), IGBC Membership, FSC & PEFC, ISO 37001:2016 (Anti-Bribery Management System).
4. The Bidder should preferably be a Member of BIFMA and at least ELEVEN Products of the OEMs should be certified as BIFMA Compliant and an official product official link/screenshot of the product listing must be provided from <https://www.bifma.org/>.
5. The Bidder should have at least TWO Products of the OEMs should be certified as BIFMA LEVEL - 1 and an official product official link/screenshot of the product listing must be provided from "https://level.bifma.org". BIFMA LEVEL -II is not acceptable.
6. The Bidder Should Have GRIHA Certificate and at Least Five Products of The OEM Should Be Certified As GRIHA V.2015, GRIHA V.2/3/ & SVAGRIHA and an Official Product Official Link/Screenshot of the Product Listing must Be provided from "www.grihaindia.org".
7. The OEM should have their registered office and service centre anywhere in the North Eastern States for atleast last three years. Documentary evidence in the form of valid Trade License and GST Certificates should be provided.
8. The OEM should have their in-house Architects based anywhere in the Consignee State for smooth designing and execution of the work. Documentary evidence in the form of License number from Council of Architecture and PF number should be provided.
9. The product should have minimum 3 years warranty.
10. The bidder should have registered office in the Consignee state of Meghalaya. documentary evidence in the form of local trade license and GST should be provided.

### **B. IT and Lab Equipment:**

- i. BIS Certification (Bureau of India Standard)
- ii. Energy Efficiency Labels (BEE Star Rating)
- iii. ISO Certificates
- iv. Warranty
- v. Bidder must also have a Technical Team of atleast 1 (One) Electrical Engineer, 2 (Two) Biomedical Engineer and 1 (One) IT Engineer in order to integrate the Lab setup in orderly manner. They must submit necessary documentary evidence of completion of the Installation along with necessary back up and earthing in North Eastern State. Also documentary evidence of the qualification of the key personnel along with an undertaking is to be submitted with the bidding documents.
- vi. The manufacturer of glassware items and small consumable items should provide the following documents mentioned below:
  - a. Annealing certificate through automated LEHR Oven
  - b. Light Transmission test certificate
  - c. Borosilicate testing reports with a time limit of within 1 year by CGCRI
  - d. ISO Certificate & MII Certificate
- g. Bidder shall either be a manufacturer of furniture or equipment having an approved manufacturing unit or a distributor/dealer having specific Authorised from OEM.
- h. Bidder should have experience in supplying furniture and equipment to Govt. Organisations in the last 5 years. At least two projects completed in relevant works in Meghalaya or North Eastern States
  - a) 1 Project  $\geq$  1 Crore each in last 5 years
  - b) 2 Project  $\geq$  50 Lakh each in last 5 years
- i. Client Certificate or supply order of similar nature from Central/State Government Department. Work order/Completion Certificate/Client Certificate from the Govt. Organisation to be enclosed.
- j. The bidder should have the following:-
  - i. A valid Company/Firm Registration Certificate.
  - ii. A valid Trade License Certificate for Non-Tribal issued by (KHADC/JHADC/GHADC).
  - iii. A valid GST Registration Certificate.
  - iv. Up-to-date GST clearance certificate
  - v. PAN/TIN Card of the firm or the person in whose name the Proprietorship, Partnership, Firm etc is registered under.



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- vi. Up-to-date Professional Tax Clearance Certificate issued by (KHADC/JHADC/GHADC).
- vii. Bidder should have a Cumulative Turnover of 10.00(Cr) (Rupees. Ten Crore) only for the last 3 financial years (Audited balance sheet/Profit & Loss Statement), CA-certified Turnover statement and Work Order i.e. 2022-23, 2023-24, 2024-25 (Annexure-VII).
- viii. The bidder must submit Income Tax Returns for the last three financial years (Annexure-VI) Or ST Certificate for Tribal.
- ix. Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance / CBI Case or arbitration cases pending.
- x. Bidder must also submit an Original Bank Solvency Certificate of having a liquidity of Rs 5.00 Crore (Rupees. Five Crore).
- xi. ROC received after the due date and time specified, or those that are unsealed, incomplete, or submitted by facsimile or email, will be summarily rejected.
- xii. The Purchaser will notify the successful bidder in writing that its Bid has been accepted and issue a Purchase Order (PO) to the successful bidder post-signing of the contract.
- xiii. Within 7 days of receipt of such intimation, the successful bidder shall give its acceptance to the State Higher Education Council, Meghalaya
- xiv. The State Higher Education Council, Meghalaya reserves the right to reject/cancel any or all others including the lowest bidder without assigning any reason thereof.
- xv. On received of the Purchase Order the selected bidder will have to execute delivery as per the delivery schedule mentioned

### **6. Submission of Bids:**

#### **(A) The bid should be submitted in a Three-cover format:**

- a) First Cover – Envelope to clearly label as **“Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya”**.
- b) Second Cover – Envelope to clearly be labelled as **“Technical Bid for Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya”**.
- c) Third Cover - Envelope to clearly be labelled as **“Financial Bid for Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya”**.
- d) All three envelopes mentioned a - c should be put inside an outer envelope which should be labelled as **“Tender for Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Educational Institutes in Meghalaya”**.

#### **(B) Super scribed Sealed Cover A – Prequalification bid (Annexure I):**

- a) Rate of Contract application form duly filled and signed by the authorised person.
- b) Original Money Receipt.
- c) Annexure I, II, III, IV, V, VI, VII, VIII, IX should be duly filled and completed in all respects.
- d) Dealership certificate in case of Dealers.
- e) Earnest Money Deposit, EMD.
- f) Company/Firm Registration Certificate.
- g) IT returns of last 3 years for Non-Tribal (Annexure-VII) or ST Certificate for Tribal.
- h) Turnover of last three financial years.
- i) GST Registration.
- j) Up-to-date GST clearance certificate.
- k) Professional Tax certificate.
- l) Copy of PAN/TIN.
- m) ISO Certificate of the Bidder.
- n) Technical Personnel Details of the Bidder
- o) Trading license for Non-Tribal or ST Certificate for Tribal.
- p) Customer feedback or supply order from Central/ State Govt. Dept.





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- q) Valid Authorisation letters mentioning the above Tender no. from the OEMs (in case of dealers) for Supply & Participation in Tender with Dealership certificate.
- r) Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance / CBI Case or arbitration cases pending.
- s) \*\*If a Non-Tribal becomes a successful bidder he/she has to furnish a Trading License from the concerned District Council before any work involving Trade is issued.

**Note:** Technical Bid will be opened only of the bidders qualified in Pre-Qualification Bid

**(C) Super scribed Sealed Cover B –Technical bid (Annexure II):**

Technical Evaluation (100 Points): Eligible firms will be evaluated based on technical merit. The key evaluation criteria and indicative weighing include:

- a) Pre-Qualification bid – 10 Marks
- b) Financial Capacity (Turnover) – 5 Marks
- c) Specifications of the products – 5 Marks
- d) Experience in a similar Nature of Works in Government Sector
  - (i) 1 Project  $\geq$  1 Crore each in last 5 years – 5 Marks
  - (ii) 2 Project  $\geq$  50 Lakh each in last 5 years – 5 Mark
- e) Standards and safety certificate – 70 Marks
  - (i) Manufacturer's valid certifications
    - a) ISO Certificates (All must be NABCB Certified)
    - b) Environmental and Product Certifications (Greenguard by UL, Greenguard Gold, Green Pro)
    - c) AIOTA Certifications (All Range)
    - d) GRIHA Certificate (GRIHA V.2015, GRIHA V.2/3/&SVAGRIHA)
    - e) BIFMA Compliance
    - f) OEM should have registered office in North Eastern States for at least 5 years. Documentary evidence in the form of a valid Trading License and GST Certificates
    - g) Warranty.
  - (ii) Containing Annexure-wise Technical bid as per format (Brochure to be enclosed)

**Note:** Financial Bid will be opened only of the bidders qualified in the Technical Bid

**(D) Super scribed Sealed Cover C – Financial bid (Annexure III):**

Containing Annexure-wise Price Bid as per format.

**Instructions:**

- a) The main Cover should be addressed to:  
**Commissioner & Secretary to the Govt. of Meghalaya, State Higher Education Council, Meghalaya.**
- b) All submitted documents should be properly page numbered, signed and have appropriate and relevant contents.
- c) The index sheet of each document should be submitted for ease & fast documentation verifications.
- d) Bid documents that do not provide complete information and/or that are submitted after the above-specified time shall be rejected.
- e) Bidder should quote their prices in the scheduled format supplied in this tender (Annexure III) form giving the breakup of prices. Tenders received in any other form will not be entertained.
- f) Bidder should sign the certificate provided in the tender form Annexure-V “that they have read and understood, all the Terms and Conditions stipulated for in the Tender, and are willing to abide by these tender terms and conditions”, before submitting the tender document. Tenders submitted without the signed declaration certificate will be considered incomplete and will not be considered.
- g) The purchaser will summarily reject the bid received by the purchaser after the deadline



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### **7. Opening of Bids:**

Bids will be opened in two stages.

First Stage

(I) Envelope A: Prequalification bid (As per Annexure-I)

(II) Envelope B: Technical bid/specification (As per Annexure-II)

Second Stage

(III) Envelope C: Financial/ Price Bid (As per Annexure- III)

If the envelopes are not sealed and marked as required above, the bid will be subject to rejection at the tender opening stage itself.

The bid shall be opened in Two stages. At the time of opening first cover (Envelope A) containing the Prequalification bid and the second cover (Envelope B) containing technical bid shall be opened shall be opened at the first stage and subsequently (Envelope C) financial bid shall be opened only after qualifying the Technical Bid. The date, time and venue for the Second stage opening will be intimated separately by the Inviting Authority (IA) only to selected/qualified bidders. The purchaser will prepare the minutes of the bid opening.

### **8. Venue of Tender Opening:**

The tender for **Supply of Furniture Items and various other equipment (Classrooms, Laboratories, IT Equipment, Hostel) in Government Institutes in Meghalaya**” will be opened in the presence of the bidders or their authorised representatives and Tender Committee Members at the venue mentioned here under.

### **9. EMD Amount:**

Tenderer needs to deposit the EMD of Rs 5,00,000.00 (Five Lakhs) shall have to be enclosed with the tender (refundable) in the form of Demand Draft/ BG payable in favour “State Higher Education Council, Meghalaya”.

(i) The EMD shall be returned to unsuccessful bidders within a period of eight (8) weeks from the date of execution of the agreement subject to the receipt of a written application addressed to the State Higher Education Council. The return of EMD shall not carry any Interest Component.

(ii) The E.M.D. / Security Deposit shall be liable to be forfeited in the following circumstances when the,

- Tender is rejected due to failure to furnish the requisite documents in the proper format or giving any misleading statement or submission of false affidavit or fabricated docs.
- Party fails to sign the agreement for entering into a contract in case the offer is accepted, due to any reason whatsoever.
- Party fails to supply the goods/items as per the orders / R.C. placed by SHEC, Meghalaya within the delivery period so stipulated.
- Party fails to replace/correct the supplied material / pre-printed stationery declared to be wrong/different from specification and R.C. holder / successful bidder has to refund the cost of such goods.

### **10. Performance Security Bond (PSB):**

(a) The successful Bidder will be liable to deposit 10% of the value of the Contract/Purchase Order as Performance Security Deposit in favour of the State Higher Education Council, Meghalaya by way of Performance Bank Guarantee in the format given at “Annexure-IX”/Fixed Demand Receipt” from nationalized/Commercial Bank refundable after the expiry of the contract/or after the completion number of warranty period +3 months in case of supply of Equipment whichever is higher, subject to successful fulfilment of terms and conditions. Security Deposit/EMD is liable to be forfeited if the bidder withdraws or impairs the bid in any respect. The security deposit is for the due performance of the agreement. Non-submission of Performance security within the specified time shall also lead to forfeiture of the EMD/PSB.

(b) Performance security deposit is retained as a security deposit until the period of work/contract may be found satisfactory and completed. The Performance security deposit may be refunded on receipt of a written application addressed to the Commissioner & Secretary, State Higher Education Council, Meghalaya. Refund of the Performance security deposit shall not carry any Interest Component.



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**11. Price Schedule:**

- a) The price offered in the tender should be as per the structure requested in the Tender document Annexure-III
- b) All Quotes shall be in Indian Rupees and duly attested in case of any corrections.
- c) All freight costs & Transit insurance are to be borne by the bidder
- d) In case of imports, all duties and any other costs (foreseen or unforeseen) have to be borne by the bidder and to be clearly indicated in the quote
- e) If more than one bidder has quoted the same price in their bids, and if it has become the Lowest Bid (L1), the decision of the Tender Committee is final to equally distribute the schedule quantity among the L1 bidders.

**12. Delivery and Completion Schedule:**

- a) The table below is the indicative delivery milestone for colleges in tranches is provided in the table below. Milestones for the rest of the Colleges will be mutually decided between the State Higher Education Council and the successful supplier. The vendor will be provided with the exact details of Colleges from the State Higher Education Council, Meghalaya.
- b) The bidder may conduct a site visit before the submission of the bid at its own cost in order to ascertain the site condition, internet connectivity, etc.

#	Milestones	Timeline
1	Signing of Contract	T= 0
2	Supply furniture/goods/Items	T+3 months

**13. Language**

The Proposal should be filled by the bidders in English language only. If any supporting documents submitted are in any language other than English, translation of the same in the English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

**14. Evaluation process**

A Bid evaluation committee shall be constituted by SHEC. The Bid Evaluation Committee may ask for meetings with the Bidders to seek clarification on their bid.

The Bid Evaluation Committee reserves the right to reject any or all bids based on any deviations.

Each of the responses shall be evaluated as per the criteria and requirements specified in this ROC.

**15. Tender Validity**

The offer submitted by the bidder will be valid for a period of 3 months only.

**16. Prequalification Evaluation:**

- a) During the first stage, the eligibility criteria outlined in the above will be evaluated. All submissions will be checked for compliance with eligibility criteria (experience, turnover, required documents). Proposals that fail to meet any essential eligibility criteria (e.g., audited financials not submitted) will be rejected without further consideration.
- b) The Evaluation Committee reserves the right to verify the authenticity of submitted documents and contact clients or references listed in the proposal

**17. Technical Evaluation:**

- a) Technical evaluation of the items tendered will be done by a Technical Committee constituted by the State Higher Education Council, Meghalaya.
- b) Specifications for each of the items will be as detailed in the respective Annexure
- c) Tenders submitted with technical specifications and commercial bid will alone be considered for evaluation.
- d) The commercial bids of suppliers who have scored more than 70 marks in the Technical Evaluation only would be considered.
- e) In case, if Technical Committee is not convinced with any of the bidder's samples with respect to Quality parameters, then it is the Committee's decision to scrap the Tender.
- f) The decision of the Committee formed by Purchaser would be final.



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- g) The work offered should meet all the technical and functional specifications given in the section “Scope of Work”. Non-compliance to any of the technical and functional specifications will attract rejection of the proposal.

### **18. Financial Evaluation:**

- The Financial Bids of technically qualified bidders will be opened on the prescribed date in the presence of bidder representatives.
- Only fixed price financial bids indicating the total price for products and services specified in this bid document will be considered.
- The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.
- Any conditional bid would be rejected. There should be only one Commercial bid submitted. Bids having more than one commercial bid would be rejected.
- Errors & Rectification: Arithmetical errors will be rectified on the following basis: “If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail”.
- If there is no price quoted for a certain material or service, the bid shall be declared as disqualified.
- The final ranking will follow a Combined Quality-Cost Based Selection(CQCBS) approach Lowest price L1 will be selected as per brand.
- In the event that there are 2 or more bidders having the same value in the financial bid, the bidder securing the highest technical score will be adjudicated as the “Best responsive bid for award of the Project.

### **19. Quality Standards:**

- The Suppliers/OEM’s are to meet the Quality Standards like OHSAS 18001:2007, ISO 14001:2004, ISO 9001:2008 or any other reputed standard by the Country of Origin. The evaluation would be done by the technical committee at the time of technical evaluation.

### **20. Samples for Inspection:**

- Samples whenever required, for valuation shall be provided by the supplier free of Cost.
- The products should fulfil technical specifications the Quality Standards like OHSAS 18001:2007, ISO 14001:2004, ISO 9001:2008 or any other reputed standard
- In case the bidder quoted more than one item for a particular item, during the Technical round the Tender committee will select one item only according to quality satisfaction & the price bid of the selected item only shall be taken into account.
- The Tender committee has the right to reject any sample in case the sample quality is found unsatisfactory and the bidder has no right to any objection.

### **21. Quantity Division:**

Each Delivery Schedule of Requirement incorporated in the tender enquiry document will be ordered from the Lowest Responsive Bidder (L1). However, the purchaser decides to assess the capacity of the L1 bidder to support the requirement. If L1 refuses to supply and in case L1 bidder capacity is less than the quantity required, the purchaser has the right to split the order quantity among the other bidders in the order of lowest to the highest bidder as per the provisions of transparency in Tenders Act & Rules, provided the next lowest bidder agrees to match the L1 rate.

### **22. Supplier Responsibility**

The supplier is responsible for the delivery of the goods in satisfactory condition and without any loss or damage at the final destination and until the same is actually received by the Purchaser at its works or other place of final destination. For this purpose, goods carried by the roadway or other carrier shall be deemed to be carried at the risk of the supplier. If on inspection at final destination the Purchaser discovers any discrepancy, the Purchaser will be entitled (not-with-standing that the property of goods shall have passed on to the company) to refuse acceptance of the goods altogether and claim damages and/or cancel the contract and buy its requirement in the open market at the risk and cost of the supplier, reserving always to itself, the right of forfeiture of any amount found due and payable or the deposit, if any, placed by the supplier for the due fulfilment of the contract as also to recover any amount, if already paid.

Any deviations deemed Inferior to the Samples provided, will render SHEC liable to initiate Criminal Charges against the Bidder/Supplier.





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### 23. Quality Inspection:

- For every unit supplied by the supplier, the conformance to the Specifications mentioned in the Tender shall be established by the supplier.
- Supplier represents and warrants that it shall fully comply with all written quality assurance requirements or instructions of SHEC, Meghalaya, and as amended from time to time at the sole discretion of SHEC, Meghalaya. Supplier further represents and warrants that the Product supplied by the Supplier in strict compliance with all applicable central, state and local laws.
- The supplier shall maintain the highest standard of quality in the Product. Supplier shall follow and abide by all directions, requests, suggestions or instructions of SHEC, Meghalaya regarding the quality standards required by SHEC, Meghalaya in connection with the manner of Packaging, storage and delivery of the Product.
- The supplier shall facilitate in-process and / or Pre-delivery inspection by the Representatives of the Purchaser, as and when, the same is required by the Purchaser.
- Notification by Supplier – In case of inspection at the Supplier's premises, notice in writing shall be sent by the Supplier, sufficiently in advance, to the Purchaser when the items to be supplied are ready for inspection.
- Rejections – At delivery, SHEC, Meghalaya in its sole discretion may reject any Product produced or manufactured by the Supplier for any reason, including Non-compliance with USFDA/CE/BIS or any other reputed standard, but not limited to defects, or failure to meet quality standards, etc.
- Removal of Rejections - Any supplies inspected and rejected at the Purchaser's premises must be removed by the Supplier, within 15 days from the date of receipt of intimation of rejection of supplies in case of indigenous suppliers & 30 days in case of foreign suppliers. If the rejected goods have already been paid for (partly or fully), the supplier shall before removal of rejected goods, either deliver correct replacement goods at Purchaser's premises completely free of cost (including cost of goods, freight, taxes, duties etc) or refund the payment received as well as make full compensation for freight taxes, duties etc. Such rejected items shall lie at the supplier's risk from the time of such rejections and if not removed within the above time limit, the Purchaser shall have the right to dispose off the said rejected materials as he may deem fit without any financial obligation to the supplier.
- If found that the Successful Bidder is incompetent to supply as requested, in such a situation, the proposal may be reviewed for award of the contract to the next qualifying bidder or go for a fresh bid depending on the circumstances. No form of compensation shall be payable in any form whatsoever to the forfeited firm. In case it is decided to go for the next qualifying bidder, negotiation may be considered to bring down their price nearer to the originally Evaluated or Lowest bidder in consideration to the equipment to be supplied.

### 24. Failure and Termination

Should the Supplier fail to deliver the items or any consignment thereof, within the period prescribed for such delivery, the Purchaser shall be entitled at his/ her option, to the following:

#### **Delayed Penalty & Liquidity Damage**

Up to 7 Days from Delivery Due Date	0.25% from the total PO value
From 8th day to 15 Day	0.50% from the total PO value
From 16th day to 22nd Day	0.75% from the total PO value
From 23rd day to 30th Day	1.00% from the total PO value
Above 30 Days	5.00% from the total PO value

### 25. Risk Purchase:

If the Supplier fails to deliver the items either in full or in part, within the prescribed delivery period, the Purchaser shall be entitled at his option to take alternate procurement action, at the risk & cost of the supplier for the unsupplied portion of the goods / items without cancelling the contract in respect of the items not yet due for delivery, or to cancel the contract based on progress of work, including items not due for delivery, and, if thought fit/necessary, to purchase the items at the risk and cost of the Supplier. The price differential in the case of higher cost to Purchaser, if any, shall have to be borne by the defaulting



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supplier. Moreover the defaulting supplier shall have no claim over the quantity, which they failed to supply.

**26. Addendum & Corrigendum:**

At any time prior to the date of submission of the Bids, the Tender Inviting Authority may, for any reason whatsoever, whether on his own initiative or in response to a clarification requested by a prospective bidders, modify the Tender Documents by an act of amendment thereafter referred to as an Addendum for Addition & Corrigendum for Correction. All prospective bidders who have received the bid documents will be notified of the Addendum / Corrigendum and that will be binding on them. In order to provide reasonable time to take the Amendment into account, the Tender Inviting Authority may at its discretion extend the date and time for submissions of Bids. The bidders should check for such amendments or Corrigendum on Education Department website. No separate intimation will be issued to them.

**27. Taxes, Duties and Levies:**

- a) Tenderers must clearly mention their Goods and Service Tax Registration, Excise Control Code Number (ECC) & TIN etc. in their offers and invoices.
- b) GST, Excise Duty, Countervailing Duty (CVD), Entry Tax, Service Tax (ST), etc. shall be clearly mentioned in the offer, indicating the applicable rates.
- c) In case if there is a decrease in the Statutory Taxes / Duties / Levies, the same has to be passed to the Purchaser.

**28. Warranties and Obligations:**

- a) Supplier irrevocably offers three years comprehensive warranty on all products
- b) Supplier represents and warrants that it will use its best efforts to produce and distribute the Product in accordance with the terms and conditions of this Agreement.
- c) Supplier shall be solely responsible for the production and distribution of the Product and will bear all related costs associated therewith, except as otherwise provided in this Agreement.
- d) Replacing or repair the defective items should be done immediately within 5 working days.

**29. Compliance of the Laws of the land:**

The supplier shall comply with all state and local laws and regulations, shall obtain all necessary licensing for the operation of its business and shall further comply with all quality control standards promulgated by SHEC, Meghalaya, from time to time.

**30. Documentation requirements:**

A supplier has to send the following documents along with the shipment.

- a) Invoice in original along with two additional copies, both duly signed and stamped by the Supplier.
- b) Original Packing list.
- c) A copy of the Purchase order raised by SHEC, Meghalaya

**31. Termination:**

SHEC, and its Tender Committee shall have the right to immediately terminate this Agreement by giving a written notice to the Supplier in the event that the Supplier does any of the following:

- a) Fails to supply the order from the date of target delivery date.
- b) Files a petition in bankruptcy or is adjudicated bankrupt or insolvent, or Supplier discontinues its business
- c) Breaches any provision of this Agreement, and fails to cure such breach within seven (7) days after it receives a written notice of breach from the SHEC, Meghalaya.
- d) SHEC, and its Tender Committee has Right to Terminate without giving any Cause. SHEC, Meghalaya shall have the right to terminate this Agreement by written notice to the Supplier.
- e) Upon receipt of the notice of termination from the Purchaser, the Supplier shall either immediately or upon the date specified in the notice of termination, cease all further supplies except for such as the Purchaser may specify in the notice of termination. In the event of termination of the Contract, the Purchaser shall only pay to the Supplier, the Price for the parts executed by the Supplier as of the date of termination.

**32. Infringements:**

The supplier agrees to fully cooperate with SHEC, Meghalaya in the prosecution of any such suit against a third party and shall execute all papers, testify on all matters, and otherwise cooperate in every way necessary and desirable for the prosecution of any such lawsuit.



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**33. Governing Law; Dispute Resolution:**

This Agreement shall be governed by, and construed in accordance with, the laws of India; without regard to conflict of law principles, and under the jurisdiction of Meghalaya and the language shall be English.

**34. Force Majeure:**

If at any time during the validity of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by reasons of War, Hostility, Acts of Public Enemy, Civil Commotion(s), Sabotage, Fire(s), Flood(s), Explosion(s), Epidemic, Quarantine Restrictions, Acts of State or Acts of God, hereinafter referred to as eventualities, then the Contract period will get extended for the period of Force Majeure, provided Notice of the happenings of any such eventualities is given, supported by a certificate of appropriate authority or Chamber of Commerce by either party to the other within 15 days from the date of occurrence thereof. Neither party shall by reason of such eventualities be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance. Work under this contract shall resume as soon as practicable after such eventualities have come to an end or ceased to exist. Should one or both parties be prevented from fulfilling their contractual obligations by state of Force Majeure lasting continuously for a period of at least three months, the parties shall consult each other regarding further continuation of the Contract.

**35. Declaration by the Tenderer:**

The Tenderer shall be required to declare whether the proprietor or any partner of the firm or Director of their company as the case may be, has any relation to any employee working with the Purchaser and if so, give the name of the employee and the relationship.

**36. Payment Terms**

Payment will be made after the successful execution of the order in totality or postal delivery, inspection, acceptance and Receipt of the Goods. The bidder should submit the bills/invoices with a copy of delivery Challans – duly acknowledged by the Purchaser and order a copy with a satisfactory inspection report of the designated Technical Committee after Delivery duly signed by the college concerned and accepted should be submitted to SHEC office, Laitumkhrah, Shillong Meghalaya in original. Three copies of each document should be made and one copy handed over to the authority at the delivery site.

**37. Right to reject Proposal**

SHEC reserves the right to accept or reject any bid, and to annul the tendering process / Public procurement process and reject all proposals at any time prior to the award of the contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for SHEC action.

**38. Details on Scope of Work**

The scope of work for this ROC will include the following activities

- a) Supply of Furniture Equipment as per specifications defined in Annexure -II (Technical Specifications)
- b) Transportation, Delivery at each individual College & installation of the furniture

Sd/-

Director of Higher & Technical Education &  
Dy. State Project Director, RUSA & PMUSHA,  
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**ANNEXURE I**

**1. Pre-Qualification Bid Checklist:**

Sl. No.	Description	Submitted Yes/No.	Page No.
1.	Name of the Company/Firm/Organization		
2.	Attested Copy of the Schedule Caste / Schedule Tribe Certificate for Tribal Firms or Trading License issued by KHADC/GHADC/JHADC in case of Non Tribals.		
3.	Attested Copy of Up-to-date Goods and Services Tax Clearance Certificate		
4.	Attested Copy of Up-to-date Professional Tax Clearance certificate issued by KHADC/GHADC/JHADC		
5.	E-Mail ID		
6.	Letter of Undertaking for authorised signatory as per Annexure IV)		
7.	Affidavit as per Annexure V		
8.	Declaration as per Annexure V typed on Company letterhead uploaded		
9.	Detail Specification Annexure-II		
10.	Technical Bid Annexure-II and Financial Bid Format Annexure-III		
11.	Copy of the latest Income Tax Return for the last three years (Annexure VI)		
12.	Copy of audited last three years turnover (Annexure VII)		
13.	Security deposit (EMD) of Rs. payable at Shillong (Annexure VIII)		
14.	Performance Security Deposit (Annexure IX)		
15.	Scoring Sheet for Technical Bid		

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ANNEXURE II

2. Detailed Technical Bids:

I. FURNITURE ITEMS

Sl.no	Furniture items	Specification
	PRINCIPAL ROOM	
1	PRINCIPAL DESK	<p>PREMIUM SUITE DESK, STRUCTURE OF TABLE TOP L-SHAPED. PRIMARY WORK SURFACE OVER ALL SIZE IS 2400MM(L)X 2330MM(D)X 770MM(H) 45MM THICK TABLE TOP MADE OF PRELAMINATED PARTICLE BOARD WORK SURFACE WITH RICH CHERRY FINISH SAME MATCHING EDGE BANDING MADE OF SAME RED CHERRY P.U POLISH. MODESTY IS DESIGNED WITH LEATHER PATCH SIDE PANEL IS MADE OF 36MM THICK .</p> <p>* PROVISION OF SIDE UNIT OF SIZE IS 1200MM(L)X 595MM(D)X 770MM(H) ,(COMBINATION CONSTRUCTION ON TABLE TOP WIRE MANAGEMENT 2 HOLE WITH SS GROOMENT &amp; 1 HOLE WITH PVC GROOMENT ON TOP SIDE UNIT. BELOW TABLE TOP ONE KEYBOARD TRAY, INSIDE UNIT BELOW THE TOP 1 KEY BOARD TRAY,1 OPEN BOX FILE, 1 DRAWER + 1 OPENABLE DOOR SHELVE.</p> <p>* FIXED PEDESTAL OF SIZE 450MM(L)X 400MM(D)X 690MM(H) , HAVING 3 EQUAL DRAWERS IN PROVIDED WITH CENTRAL LOCK FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING. OVERALL CONSTRUCTION OF PEDESTAL IS 18 MM ALONG WITH FECEIA OF DRAWERS.</p> <p>* ALL THE MDF BORAD ARE IS-14587-1998 WITH CONFIRM TO DIN 68861.ISO 9001- 2015 QUALITY CERTIFICATION CONFIRMING TO ASTM D 4499 STANDARDS FOR VISCOSITY AND THERMAL STABILITY .</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>

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2	BACK UNIT STORAGE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER , BACK UNIT SIZE : 2400 MM (L)X 400 MM (D)X 1040 MM (H). COLOUR : RED - DARK CHERRY &amp; FINISH : GLOSSY .</p> <p>* PROVIDING &amp; SUPPLING PLACING POSITION OF MODULAR BACK UNIT TOP SHALL BE MADE FROM 25 MM THICK PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER OF GRADE II TYPE III OF IS 12823/LATEST &amp; CONFIRM TO DIN 68861.ISO 9001- 2015.</p> <p>* WHILE REST OF THE SIDES AS WELL AS SHELVES AND SHUTTER TO BE MADE UP OF 18 MM THICK PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER P.U. POLISH. ALL EDGES TO BE PROVIDED WITH SAME MATCHING VENEER EDGE BANDING FIXED WITH THE HOT MELT GLUE.</p> <p>* STORAGE UNIT WITH 3 OPEN CARCASS, 4 SHUTTERS + 3 DRAWERS CONSTRUCTION IS BELOW THE TOP 3 OPEN CARCASS SHELVES AT SAME SIZE PER CARCASS SIZE IS 555 (L) X 380 (H),2 OPENABLE DOORS WITH 1 FIXED SHELVE + 3 DRAWERS + 2 OPENABLE DOORS WITH 1 FIXED SHELVE, IN PROVIDED WITH 2 UNIVERSAL CAM LOCK + 1 CENTRAL LOCKS FOR DRAWER'S FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING. OVERALL HEIGHT OF PRODUCT IS @ 1040 MM .</p> <p>* EACH SHUTTER SHOULD BE FIXED WITH REQUIRED NUMBERS HINGES, SS TOWER BOLT OF 100 X 10, DOUBLE STRIP MAGNETIC CATCHER AND DRAWERS SHALL HAVE 100 MM SIZE SS FANCY HANDLES (ONE ON EACH DRAWER) WITH NECESSARY HARDWARE/ FITTING/ HINGES ETC. OF APPROVED QUALITY(MAKE: EBCO).FOR INSTALLATION OF SIDE UNIT WOODEN DOWELS AND MINIFIX TO USE FOR ADDITIONAL SUPPORT.</p>
3	HIGH BACK CHAIR	<p>THE CAMDEN LEATHERETTE OFFICE CHAIR OF SIZE:- (W)655MM X (D)500MM X (H)1230MM IS AN ERGONOMIC HIGH BACK CHAIR MADE FOR A BUSINESS TYCOON OR A DIRECTOR. THE SEAT IS CONSTRUCTED FROM A COMBINATION OF RESILIENT PLYWOOD AND SOFT FOAM FOR A COMFORTABLE SEAT. THE FOAM CUSHIONS ARE ENCASED IN A CHOCOLATE BROWN LEATHERETTE UPHOLSTERY. THE SEAT ARMS COME PADDED WITH FOAM AND ARE COVERED IN THE SAME BROWN UPHOLSTERY FOR A RELAXED ARMREST. POWERED BY A SYNCHRO MULTI LOCKING MECHANISM THE CHAIR OFFERS YOU EXTREME COMFORT AS PER YOUR SEATING POSITION. THE CHAIR TO BE PROVISIONED WITH TILT TENSION CONTROL AND SYNCHRO MULTILOCKING MECHANISM. THE CHAIR TO BE PROVISIONED WITH PNEUMATIC HEIGHT ADJUSTMENT WHICH SHALL HAVE STROKE OF 10</p>
4	LOW BACK CHAIR	<p>THE CAMDEN LEATHERETTE OFFICE CHAIR OF SIZE: (W)555MM X (D)500MM X (H)1105MM IS A ERGONOMIC LOW BACK CHAIR MADE FOR A BUSINESS TYCOON OR A DIRECTOR. THE SEAT IS CONSTRUCTED FROM A COMBINATION OF RESILIENT PLYWOOD AND SOFT FOAM FOR A COMFORTABLE SEAT. THE FOAM CUSHIONS ARE ENCASED IN A CHOCOLATE BROWN LEATHERETTE UPHOLSTERY. THE SEAT ARMS COME PADDED WITH FOAM AND ARE COVERED IN THE SAME BROWN UPHOLSTERY FOR A RELAXED ARMREST. POWERED BY A SYNCHRO MULTI LOCKING MECHANISM THE CHAIR OFFERS YOU EXTREME COMFORT AS PER YOUR SEATING POSITION. THE CHAIR TO BE PROVISIONED WITH TILT TENSION CONTROL AND SYNCHRO MULTILOCKING MECHANISM. THE CHAIR TO BE PROVISIONED WITH PNEUMATIC HEIGHT ADJUSTMENT WHICH SHALL HAVE STROKE OF 10</p>



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5	3 SEATER SOFA	<p>SIZE : 1830MM(L) X760MM(D)X 790MM(H) MATERIAL : PREMIUM LEATHERETTE / STYLE : CONTEMPORARY COLOUR : BROWN-CAMEL BROWN / FINISH : MATTE.</p> <p>* SUPPLYING AND PLACING THREE SEATER SOFA THAT SHALL BE CONSTRUCTED FROM NATURAL HARD WOOD AND COMMERCIAL PLYWOOD HAVING INNER FRAME. THE THICKNESS OF THE WOOD SHOULD ALLOW FOR THE HEAVY TENSION WEBBING. THE SOFA SIZE IS 1830MM(L) X760MM(D)X 790MM(H) SHALL HAVE SPRING ATTACHED AND ALSO BE PADDED SEPARATELY. THE SEAT SHALL HAVE DOUBLE CONE SPRING INTEGRATED WITH EPITOME OF LUXURY. THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 45KG/M<sup>3</sup> IN SEAT AND 32KG/M<sup>3</sup> IN BACK. THERE SHALL BE CUSHION ARM PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32KG/M<sup>3</sup>.</p> <p>* THE COMPLETE STRUCTURE SHALL BE UPHOLSTEREDWITH LEATHERITE TAPESTRY 0.8 +/- 50.1 MM THICK AND 535 GSM. THE COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE).UNDERSTRUCTURE SHALL CONSIST OF MS POWDER COATED SQUARE PIPE HAVING CROSS-SECTION AREA 25MM X 25MM WITH 1.6MM THICK THE LEGS SHALL BE MADE UP OF POWDER COATED ROUND PIPE OF DIA. 25.4MM WITH 1.6MM THICK. THERE SHALL BE CO-POLYMER POLYPROPYLENE SHOE PROVIDED AT THE BOTTOM TO AVOID SCRATCHES ON THE FLOOR.THE SEAT SIZE SHALL BE 490 +/- 510MM(D) X 450 +/- 510MM(H).</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM <a href="http://WWW.BIFMA.ORG">WWW.BIFMA.ORG</a>".</p>
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6	1 SEATER SOFA	<p>SIZE : 790MM(L) X760MM(D)X 790MM(H) MATERIAL : PREMIUM LEATHERETTE / STYLE : CONTEMPORARY COLOUR : BROWN-CAMEL BROWN / FINISH : MATTE.</p> <p>* SUPPLYING AND PLACING A SINGLE SEATER SOFA THAT SHALL BE CONSTRUCTED FROM NATURAL HARD WOOD AND COMMERCIAL PLYWOOD HAVING INNER FRAME. THE THICKNESS OF THE WOOD SHOULD ALLOW FOR THE HEAVY TENSION WEBBING. THE SOFA SIZE IS 790MM(L) X760MM(D)X 790MM(H) SHALL HAVE SPRING ATTACHED AND ALSO BE PADDED SEPARATELY. THE SEAT SHALL HAVE DOUBLE CONE SPRING INTEGRATED WITH EPITOME OF LUXURY. THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 45KG/M³ IN SEAT AND 32KG/M³ IN BACK. THERE SHALL BE CUSHION ARM PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32KG/M³.</p> <p>* THE COMPLETE STRUCTURE SHALL BE UPHOLSTERED WITH LEATHERITE TAPESTRY 0.8 +/- 50.1 MM THICK AND 535 GSM. THE SOFA SHALL BE SUPPORTED ON CRCA POWDER COATED PIPE FRAME HAVING CROSS-SECTION AREA 30MM X 15MM. THE COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE). UNDERSTRUCTURE SHALL HAVE MS POWDER COATED ROUND PIPE OF DIA. 25.4MM REDUCING LEG. THERE SHALL BE POLYPROPYLENE CO-POLYMER SHOE PROVIDED AT THE BOTTOM TO AVOID SCRATCHES ON THE FLOOR AS WELL AS UNEVEN SURFACING. THE SEAT SIZE SHALL BE 570 +/- 510MM(L) X 490 +/- 510MM(D) X 450 +/- 510MM(H).</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
7	CENTER TABLE	<p>MATERIAL &amp; SUBTYPE ENGINEERED WOOD - MDF TABLE TOP MATERIAL ENGINEERED WOOD LEG MATERIAL ENGINEERED WOOD FINISH MATTE COLOUR &amp; COLOUR FAMILY BROWN - WALNUT DIMENSION (W) 1200MM X (D) 600MM X (H) 455MM TABLE TOP THICKNESS 20MM SIZE STANDARD STYLE MODERN ASSEMBLY TYPE KNOCK DOWN STORAGE TYPE OPEN STORAGE</p>
	VICE PRINCIPAL ROOM	





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8	VICE PRINCIPAL DESK	<p>PREMIUM SUITE DESK, STRUCTURE OF TABLE TOP L-SHAPE . PRIMARY WORK SURFACE OVER ALL SIZE IS 2400MM(L)X 1000MM(D)X 770MM(H) 50MM THICK TABLE TOP MADE OF MDF BOARD WITH NATURAL VANNER WORK SURFACE WITH CHERRY FINISH VENEER SAME MATCHING VENEER EDGE BANDING MADE OF SAME DARK CHERRY P.U. POLISH.MODESTY IS DESIGNED WITH LEATHER PATCH.SIDE PANNEL MADE OF 40MM THICK .</p> <p>* PROVISION OF SIDE UNIT OF SIZE IS 900MM(L)X 595MM(D)X 770MM(H) ,CONSTRUCTION OF SIDE UNIT TOP MADE OF 50MM THICK, 1 FIXED SHELVE WITH 1 SLIDDING SHUTTER.</p> <p>* ALL THE MDF BORAD ARE IS-14587-1998 WITH CONFIRM TO DIN 68861.ISO 9001- 2015 QUALITY CERTIFICATION CONFIRMING TO ASTM D 4499 STANDARDS FOR VISCOSITY AND THERMAL STABILITY .</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
9	ARROW BACK UNIT BACK UNIT STORAGE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER , BACK UNIT SIZE : 1600 MM (L)X 400 MM (D)X 770 MM (H). COLOUR : RED - DARK CHERRY &amp; FINISH : GLOSSY .</p> <p>* PROVIDING &amp; SUPPLING PLACING POSITION OF MODULAR BACK UNIT TOP SHALL BE MADE FROM 25 MM THICK PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER OF GRADE II TYPE III OF IS 12823/LATEST &amp; CONFIRM TO DIN 68861.ISO 9001- 2015.</p> <p>* WHILE REST OF THE SIDES AS WELL AS SHELVES AND SHUTTER TO BE MADE UP OF 18 MM THICK PRELAMINATED PARTICLE BOARD/VENEER - MDF/STEAM BEECH VENEER P.U. POLISH. ALL EDGES TO BE PROVIDED WITH SAME MATCHING VENEER EDGE BANDING FIXED WITH THE HOT MELT GLUE.</p> <p>* STORAGE UNIT WITH 4 SHUTTERS CONSTRUCTION IS 2 OPENABLE DOORS WITH 1 FIXED SHELVE + 2 OPENABLE DOORS WITH 1 FIXED SHELVE , IN PROVIDED WITH 2 UNIVERSAL CAM LOCK FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING. OVER ALL HEIGHT OF PRODUCT IS @ 770 MM .</p> <p>* EACH SHUTTER SHOULD BE FIXED WITH REQUIRED NUMBERS HINGES, SS TOWER BOLT OF 100 X 10, DOUBLE STRIP MAGNETIC CATCHER AND DRAWERS SHALL HAVE 100 MM SIZE SS FANCY HANDLES (ONE ON EACH DRAWER) WITH NECESSARY HARDWARE/ FITTING/ HINGES ETC. OF APPROVED QUALITY(MAKE: EBCO).FOR INSTALLATION OF SIDE UNIT WOODEN DOWELS AND MINIFIX TO USE FOR ADDITIONAL SUPPORT.</p> <p>* ALL THE MDF BORAD ARE IS-14587-1998 WITH CONFIRM TO DIN 68861.ISO 9001- 2015 QUALITY CERTIFICATION CONFIRMING TO ASTM D 4499 STANDARDS FOR VISCOSITY AND THERMAL STABILITY .</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO,</p>



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		<p>AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
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MEGHALAYA**



STATE HIGHER EDUCATION COUNCIL [SHEC]  
**MEGHALAYA ::: SHILLONG**

MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

10	EXECUTIVE HIGH BACK CHAIR	<p>SUPPLYING AND PLACING IN POSITION LEATHERETTE EXECUTIVE HIGH BACK CHAIR IN GREIGE SIZE :- (W)720MM X (D)560MM X (H)1215MM. SEAT DEPTH 500MM. SEAT WIDTH 560MM. BACK HEIGHT 730MM. BEAUTIFUL IN ITS SIMPLICITY, OUR COBURN COLLECTION WELCOMES YOU WITH ITS GENTLE CURVES AND ERGONOMIC COMFORT. TAILORED TO PERFECTION IN SUMPTUOUS LEATHERETTE, THIS HIGH-BACK DIRECTOR’S CHAIR LETS YOU GET BUSY IN ULTIMATE COMFORT, ALL WHILE ADDING REFINED SOPHISTICATION TO YOUR MODERN WORKSPACE. MECHANISM SYNCHRO SINGLE LOCKING, FUNCTION REVOLVING, ADJUSTABLE HEIGHT, TILT TENSION CONTROL. ERGONOMIC DESIGN HELPS MAINTAIN POSTURE FOR BETTER PRODUCTIVITY. BUTTERY SOFT LEATHERETTE LOOKS AND FEELS OPULENT. PADDED SEAT, HIGH BACKREST, AND PADDED ARMRESTS OFFER A COMFORTABLE SEATING EXPERIENCE. PNEUMATIC HEIGHT ADJUSTMENT LETS YOU MATCH THE DESK HEIGHT. TILT TENSION CONTROL LETS YOU INCREASE OR DECREASE THE RESISTANCE WHILE YOU RECLINE. SYNCHRONIZE RECLINE UP TO 145 DEGREE WITH SINGLE LOCKING POSITION OFFERS A PERSONALIZED COMFORT. 120 KG LOAD-BEARING CAPACITY ENSURES STABILITY AND SECURITY FOR THE USER. A STURDY METAL BASE ENSURES LONGEVITY, ALL WHILE ELEVATING THE AESTHETIC. HIGH-QUALITY CASTORS ENSURE SMOOTH NOISE-FREE MOVEMENT. THIS PRODUCT IS A PART OF THE COBURN COLLECTION. THE SELLER / COMPANY SHOULD BE ISO 9001:2008, ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, OHSAS 18001:2007, GREENGUARD, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT. THE MANUFACTURER SHOULD EITHER OFFER PRODUCTS HAVING GRIHA COMPLIANCE OR THE OEM SHOULD HAVE FSC CERTIFICATE. THE MANUFACTURER SHOULD BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, ISO 13485:2016 (ALL ISO CERTIFICATIONS BY NABCB CERTIFIED), GREEN PRO, AIOTA (OFFICE FURNITURE RANGE), AIOTA (EDUCATIONAL FURNITURE RANGE), AIOTA (STORAGE FURNITURE RANGE), AIOTA (SEATING SYSTEM RANGE), INDOOR ADVANTAGE™ GOLD (TABLE &amp; SEATING), INDIAN DESIGN MARK, GRIHA, IGBC MEMBERSHIP, FSC &amp; PEFC. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWENTY PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM “WWW.BIFMA.ORG”. THE MANUFACTURER SHOULD HAVE AT LEAST TWO PRODUCTS OF THE OEMS SHOULD BE CERTIFIED AS BIFMA LEVEL - 1 AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM “HTTPS://WWW.BIFMA.ORG/PAGE/LEVEL”</p>
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STATE HIGHER EDUCATION COUNCIL [SHEC]

MEGHALAYA ::: SHILLONG

MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

11	EXECUTIVE MEDIUM BACK CHAIR	<p>SUPPLYING AND PLACING IN POSITION LEATHERETTE EXECUTIVE MEDIUM BACK CHAIR IN GREIGE SIZE :- (W)720MM X (D)560MM X (H)1065MM. SEAT DEPTH 500MM. SEAT WIDTH 560MM. BACK HEIGHT 560MM. BEAUTIFUL IN ITS SIMPLICITY, OUR COLLECTION WELCOMES YOU WITH ITS GENTLE CURVES AND ERGONOMIC COMFORT. TAILORED TO PERFECTION IN SUMPTUOUS LEATHERETTE. ALL WHILE ADDING REFINED SOPHISTICATION TO YOUR MODERN WORKSPACE. MECHANISM SYNCHRO SINGLE LOCKING, FUNCTION REVOLVING, ADJUSTABLE HEIGHT, TILT TENSION CONTROL. ERGONOMIC DESIGN HELPS MAINTAIN POSTURE FOR BETTER PRODUCTIVITY. BUTTERY SOFT LEATHERETTE LOOKS AND FEELS OPULENT. PADDED SEAT, HIGH BACKREST, AND PADDED ARMRESTS OFFER A COMFORTABLE SEATING EXPERIENCE. PNEUMATIC HEIGHT ADJUSTMENT LETS YOU MATCH THE DESK HEIGHT. TILT TENSION CONTROL LETS YOU INCREASE OR DECREASE THE RESISTANCE WHILE YOU RECLINE. SYNCHRONIZE RECLINE UP TO 145 DEGREE WITH SINGLE LOCKING POSITION OFFERS A PERSONALIZED COMFORT. 120 KG LOAD-BEARING CAPACITY ENSURES STABILITY AND SECURITY FOR THE USER. A STURDY METAL BASE ENSURES LONGEVITY, ALL WHILE ELEVATING THE AESTHETIC. HIGH-QUALITY CASTORS ENSURE SMOOTH NOISE-FREE MOVEMENT. THIS PRODUCT IS A PART OF THE COBURN COLLECTION.</p> <p>THE SELLER / COMPANY SHOULD BE ISO 9001:2008, ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, OHSAS 18001:2007, GREENGUARD, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT. THE MANUFACTURER SHOULD EITHER OFFER PRODUCTS HAVING GRIHA COMPLIANCE OR THE OEM SHOULD HAVE FSC CERTIFICATE. THE MANUFACTURER SHOULD BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM <a href="http://WWW.BIFMA.ORG">WWW.BIFMA.ORG</a>".THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, ISO 13485:2016 (ALL ISO CERTIFICATIONS BY NABCB CERTIFIED), GREEN PRO, AIOTA (OFFICE FURNITURE RANGE), AIOTA (EDUCATIONAL FURNITURE RANGE), AIOTA (STORAGE FURNITURE RANGE), AIOTA (SEATING SYSTEM RANGE), INDOOR ADVANTAGE™ GOLD (TABLE &amp; SEATING), INDIAN DESIGN MARK, GRIHA, IGBC MEMBERSHIP, FSC &amp; PEFC. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWENTY PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM "WWW.BIFMA.ORG". THE MANUFACTURER SHOULD HAVE AT LEAST TWO PRODUCTS OF THE OEMS SHOULD BE CERTIFIED AS BIFMA LEVEL - 1 AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM "<a href="https://WWW.BIFMA.ORG/PAGE/LEVEL">HTTPS://WWW.BIFMA.ORG/PAGE/LEVEL</a>"</p>
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# STATE HIGHER EDUCATION COUNCIL [SHEC]

## MEGHALAYA ::: SHILLONG

MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

12	3 SEATER SOFA	<p>SIZE : 1800MM(L) X710MM(D)X 770MM(H) MATERIAL : PREMIUM LEATHERETTE / STYLE : MODERN COLOUR : PREMIUM LEATHERETTE WITH SOLID WOOD / FINISH : MATTE.</p> <p>* SUPPLYING AND PLACING THREE SEATER EXCLUSIVE PREMIUM LEATHERETTE MODERNIST CLASSIC DESIGN LOUNGE SEATING SOFA SIZE IS 1800MM(L) X710MM(D)X 770MM(H) WITH KILN-DRIED WOOD FRAMING MAKES IT WARP AND SCRATCH RESISTANT,COMFORTABLE SEAT DEPTH &amp; HEIGHT DESIGNED KEEPING MODERN INDIAN LIFESTYLE IN MIND,WRAPPED IN BUTTERY-SOFT PREMIUM LEATHERETTE, THE PANELLED BACK AND CUSHIONED ARMRESTS ENCOURAGE LOUNGING,DESIGNED WITH MODERNITY &amp; ELEGANCE, CHOOSE THE OPTION THAT SUITS YOUR HOME.</p> <p>* COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE).UNDERSTRUCTURE FRAME SHALL BE CONSTRUCTED FROM 18 MM THICK KILN-DRIED GERMAN BEECH WOOD FRAMING IS HIGHLY DURABLE. THE COMPLETE STRUCTURE SHALL BE COVERED BY P.U.FOAM FIXED WITH ADHESIVE GLUE ,THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING 28 +/- 5 DENSITY IN SEAT IT SHALL BE STACK FOAM OF 50MM THIK,40MM THICK BACK FOAM HAVING 20 +/- 5 DENSITY FOAM USED ,THERE SHALL BE CUSHION ARM 10MM THICK PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32 +/- 5. THE COMPLETE STACK FOAM STRUCTURE SHALL BE COVERED WITH PREMIUM LEATHERETTE IN PREMIUM LEATHERETTE WITH SOLID WOOD COLOUR, IT COMPLEMENTS THE MODISH SOLID WOOD LEGS.( SEAT HEIGHT @ 525MM(H) , BACK HEIGHT @ 400MM )</p>
13	2 SEATER SOFA	<p>SIZE : 1530MM(L) X710MM(D)X 770MM(H) MATERIAL : PREMIUM LEATHERETTE / STYLE : MODERN COLOUR : PREMIUM LEATHERETTE WITH SOLID WOOD / FINISH : MATTE.</p> <p>* SUPPLYING AND PLACING TWO SEATER EXCLUSIVE PREMIUM LEATHERETTE MODERNIST CLASSIC DESIGN LOUNGE SEATING SOFA SIZE IS 1530MM(L) X710MM(D)X 770MM(H) WITH KILN-DRIED WOOD FRAMING MAKES IT WARP AND SCRATCH RESISTANT,COMFORTABLE SEAT DEPTH &amp; HEIGHT DESIGNED KEEPING MODERN INDIAN LIFESTYLE IN MIND,WRAPPED IN BUTTERY-SOFT PREMIUM LEATHERETTE, THE PANELLED BACK AND CUSHIONED ARMRESTS ENCOURAGE LOUNGING,DESIGNED WITH MODERNITY &amp; ELEGANCE, CHOOSE THE OPTION THAT SUITS YOUR HOME.</p> <p>* COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE).UNDERSTRUCTURE FRAME SHALL BE CONSTRUCTED FROM 18 MM THICK KILN-DRIED GERMAN BEECH WOOD FRAMING IS HIGHLY DURABLE.THE COMPLETE STRUCTURE SHALL BE COVERED BY P.U.FOAM FIXED WITH ADHESIVE GLUE ,THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING 28 +/- 5 DENSITY IN SEAT IT SHALL BE STACK FOAM OF 50MM THIK,40MM THICK BACK FOAM HAVING 20 +/- 5 DENSITY FOAM USED ,THERE SHALL BE CUSHION ARM 10MM THICK PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32 +/- 5. THE COMPLETE STACK FOAM STRUCTURE SHALL BE COVERED WITH PREMIUM LEATHERETTE IN PREMIUM LEATHERETTE WITH SOLID WOOD COLOUR, IT COMPLEMENTS THE MODISH SOLID WOOD LEGS. ( SEAT HEIGHT @ 525MM , BACK HEIGHT @ 400MM )</p>



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**MEGHALAYA ACT NO.3 OF 2018**

**Vide Notification No. LL(B).78/2017/16, dated 27.04.2018**

14	CENTRE TABLE	<p>PROVIDING AND FIXING TABLES OF CENTRE TABLE SIZE - 1100MM W X 500MM D X 365MM WITH TOP MADE OF PARTICLE BOARD OF APPROVED MAKE, GRADE E- 1(ENVIRONMENTALLY FRIENDLY), WITH THICKNESS 25MM, COVERED WITH MELAMINE LAMINATE AND EDGE BANDING WITH 2MM PVC STRIP OF MATCHING SHADE. LAMINATE SHALL BE OF ZERO UREA FORMALDEHYDE EMISSIONS (&lt;OR= 8MG/100 G OVEN DRY BOARD-PERFORATED METHOD) AND SHALL COMPLY WITH (EN 120-1992).THE UNDERSTRUCTURE SHALL BE MADE OF 304 GRADE S.S. BASE OF APPROVED SECTION. PRODUCT SHOULD BE BIFMA GOLD RATED SCS GLOBAL CERTIFIED FOR INHOUSE AIR QUALITY AND WITH 05 YEARS WARRANTY.</p>
<b>ADMINISTRATIVE OFFICE</b>		
15	DIRECTOR DESK	<p>DIRECTOR DESK, STRUCTURE OF TABLE TOP L-SHAPE . PRIMARY WORK SURFACE OVER ALL SIZE IS 2000MM(L)X 1800MM(D)X 755MM(H) 45MM THICK TABLE TOP MADE OF PRELAMINATED PARTICLE BOARD WORK SURFACE WITH WARM WALNUT FINISH, 2MM THICK PVC EDGE BANDING MADE OF SAME MATTE FINISH. SIDE PANNEL IS MADE OF 45MM THICK .</p> <p>* PROVISION OF SIDE RUNNER OF SIZE IS 1800MM(L)X 500MM(D)X 660MM(H) ,(COMBINATION CONSTRUCTION- TABLE TOP BASED ON SS STUD GRADE 304 RIGHT SIDE BELOW FROM TABLE TOP SIDE RUNNER HAVE 2 DOORS STORAGE + 3 DRAWERS WITH CETNRAL LOCK FOR SECURITY AND + 1 OPEN BOX FIXED SHELVE &amp; LEFT SIDE BELOW SS STUD 1 FIXED PEDESTAL TOP 25MM THICK SIZE IS 400MM(L)X 500MM(D)X 650MM(H).</p> <p>* FIXED PEDESTAL OF SIZE 495MM(L)X 750MM(D)X 755MM(H) , HAVING 1 OPENABLE DOOR WITH CENTRAL LOCK FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD(WOOD PRODUCT) OF GRADE II TYPE III OF IS 12823/LATEST ,</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG"</p>

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MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

17	MEDIUM BACK CHAIR	<p>SUPPLYING AND PLACING IN POSITION OF LEATHERETTE MEDIUM BACK CHAIR IN BLACK COLOUR SIZE :- (W)650MM X (D)650MM X (H)1070 MM. SEATING HEIGHT 530MM. MASTERFULLY TAILORED IN BUTTERY-SOFT LEATHERETTE TO ACCENTUATE ITS CURVES, THE CHAIR COLLECTION FEATURES REFINED SILHOUETTES THAT ADD COMFORT TO MODERN WORKSPACES. FEATURING 3D ARMRESTS TAILORED TO YOUR COMFORT, IT LETS YOU MATCH YOUR DESK HEIGHT. AFFIXED WITH PREMIUM CASTERS FOR FLUID MOVEMENT ACROSS ANY SURFACE, THIS HIGH-BACK MULTIFUNCTIONAL CHAIR WORKS JUST AS WONDERFULLY IN A WORKSPACE AS IT DOES IN A STUDY. ERGONOMIC DESIGN HELPS MAINTAIN POSTURE FOR BETTER PRODUCTIVITY. HEIGHT ADJUSTABLE LUMBAR SUPPORT FOR PERSONALISED COMFORT. BREATHABLE LEATHERETTE UPHOLSTERY FEELS SOFT AND KEEPS YOU COOLER FOR LONGER. ADJUSTABLE 3D ARMRESTS LET YOU MATCH YOUR DESK HEIGHT. ADJUSTABLE HEADREST ENABLE TO ADAPT YOUR SEATING POSTURE BASED ON THE TASK. GENEROUSLY PADDED SEAT AND HIGH BACKREST OFFERS COMFORTABLE SEATING EXPERIENCE. PADDED ARMRESTS FURTHER ELEVATES COMFORT. PNEUMATIC HEIGHT ADJUSTMENT LETS YOU MATCH THE DESK HEIGHT. TILT TENSION CONTROL LETS YOU INCREASE OR DECREASE THE RESISTANCE WHILE YOU RECLINE. SYNCHRONISED MECHANISM WITH 4 RECLINING POSITION OFFERS PERSONALISED COMFORT. 136 KG LOAD-BEARING CAPACITY ENSURES STABILITY AND SECURITY FOR THE USER. PREMIUM NYLON BASE ENSURES LONGEVITY. HIGH-QUALITY CASTORS ENSURE SMOOTH NOISE-FREE MOVEMENT. THE SELLER / COMPANY SHOULD BE ISO 9001:2008, ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, OHSAS 18001:2007, GREENGUARD, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT. THE MANUFACTURER SHOULD EITHER OFFER PRODUCTS HAVING GRIHA COMPLIANCE OR THE OEM SHOULD HAVE FSC CERTIFICATE. THE MANUFACTURER SHOULD BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG". THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, ISO 13485:2016 (ALL ISO CERTIFICATIONS BY NABCB CERTIFIED), GREEN PRO, AIOTA (OFFICE FURNITURE RANGE), AIOTA (EDUCATIONAL FURNITURE RANGE), AIOTA (STORAGE FURNITURE RANGE), AIOTA (SEATING SYSTEM RANGE), INDOOR ADVANTAGE™ GOLD (TABLE &amp; SEATING), INDIAN DESIGN MARK, GRIHA, IGBC MEMBERSHIP, FSC &amp; PEFC. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWENTY PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM "WWW.BIFMA.ORG". THE MANUFACTURER SHOULD HAVE AT LEAST TWO PRODUCTS OF THE OEMS SHOULD BE CERTIFIED AS BIFMA LEVEL - 1 AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM "HTTPS://WWW.BIFMA.ORG/PAGE/LEVEL"</p>
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STATE HIGHER EDUCATION COUNCIL [SHEC]  
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MEGHALAYA ACT NO.3 OF 2018

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18	BACK UNIT STORAGE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD , BACK UNIT SIZE : 1600 MM (L)X 450 MM (D)X 800 MM (H). COLOUR : BROWN-WCLASSIC WALNUT BROWN-SMOKE OAK &amp; FINISH : LAMINATE FINISH .</p> <p>* PROVIDING &amp; SUPPLING PLACING POSITION OF MODULAR BACK UNIT TOP SHALL BE MADE FROM 18 MM THICK PRELAMINATED PARTICLE BOARD OF GRADE II TYPE III OF IS 12823/LATEST.</p> <p>* WHILE REST OF THE SIDES AS WELL AS SHELVES AND SHUTTER TO BE MADE UP OF 18 MM THICK PRELAMINATED PARTICLE BOARD. MACHINE PRESSED EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED DULY PASTED WITH THE ASSISTANCE OF EDGE BANDING MACHINE AT 200 DEGREE CELSIUS.</p> <p>* STORAGE UNIT WITH 4 SHUTTERS CONSTRUCTION IS 1 OPENABLE DOOR WITH 1 FIXED SHELVE + 2 OPENABLE DOOR WITH 1 FIXED SHELVE + 1 OPENABLE DOOR WITH 1 FIXED SHELVE , IN PROVIDED WITH 3 UNIVERSAL CAM LOCK FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING. OVER ALL HEIGHT OF PRODUCT IS @ 800 MM .</p> <p>* EACH SHUTTER SHOULD BE FIXED WITH REQUIRED NUMBERS HINGES, SS TOWER BOLT OF 100 X 10, DOUBLE STRIP MAGNETIC CATCHER AND DRAWERS SHALL HAVE 100 MM SIZE SS FANCY HANDLES (ONE ON EACH DRAWER) WITH NECESSARY HARDWARE/ FITTING/ HINGES ETC. OF APPROVED QUALITY(MAKE: EBCO).FOR INSTALLATION OF SIDE UNIT WOODEN DOWELS AND MINIFIX TO USE FOR ADDITIONAL SUPPORT.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD ( WOOD PRODUCT ) OF GRADE II TYPE III OF IS 12823/LATEST.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
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**MEGHALAYA ACT NO.3 OF 2018**

**Vide Notification No. LL(B).78/2017/16, dated 27.04.2018**

19	PERSONAL LOCKER	<p>SUPPLYING AND INSTALLATION OF METAL LOCKERS WITH CAM LOCK ONE UNIT CONSISTING OF 381 MM (W) X 381 MM (D) X 1831 MM (H) WITH 4 LOCKERS. BODY-LH AND RH SIDE AND BACK PANEL IS MADE UP OF 0.8MM THICK CRCA STEEL SHEET CONFIRMING TO IS 513 :2008 WHICH IS HAVING STANDARD DIMENSION 1831 X380MM. SHELF HANGING BRACKET IS WELDED ON BOTH THE SIDE PANEL BY SPOT WELDING. SHELF HANGING BRACKET IS MADE UP OF 0.8MM THICK CRCA STEEL SHEET CONFIRMING TO IS FRONT FRAME, TOP AND BOTTOM PART MADE UP 0.8MM THICK CRCA STEEL SHEET CONFIRMING TO IS 513 AND HORIZONTAL PART IS MADE UP IMM THICK CRCA STEEL SHEET CONFIRMING TO IS 513:2008. ON A FRONT FRAME HORIZONTALLY PROVISION IS GIVEN AT A COMMON DISTANCE TO HOLD SHUTTER BRACKET. LOCKER'S TOP IS MADE UP OF 0.8MM THICK CRCA STEEL SHEET CONFIRMING IS 513:2008 WHICH IS HAVING STANDARD DIMENSION 375 X378MM. SHELF IS ALSO MADE UP OF 0.8 MM CRCA STEEL SHEET CONFIRMING TO IS 513:2008. SHUTTER- IS MADE UP ON 0.7MM THICK CRCA STEEL SHEET CONFIRMING TO IS 513:2008. ALL THE SHUTTER ARE HUNG ON SHUTTER PIN AND SHUTTER BRACKET, LOUVERS ARE GIVEN IN SHUTTER FOR AIR FLOW. PVC FLUSH HANDLE AND NAME PLATE IS USED FOR HANDLING AND FOR NAME PLATE TAGGING. STANDARD LOCKING ARRANGEMENT IS USED FOR LOCKING EACH SHUTTER. THE BODIES INCLUDING SHELVES ARE GIVEN ANTI-RUST SURFACE TREATMENT &amp; ARE POWDER COATED WITH EPOXY POLYESTER POWDER COATING OF DFT 50-60 MICRON CONFIRMING TO IS 13871:1993.</p>
	<b>CLASS ROOM</b>	
20	DESK AND BENCH (1 Seater)	<p>MATERIAL : PRELAMINATED PARTICLE BOARD WITH MS BASE SIZE : 600MM(L)X 950MM(D)X 760MM(H) COLOUR : BEVERIAN BEECH / FINISH : MATTE / PRODUCT WEIGHT : 21 KG APPROX.</p> <p>* PROVIDING &amp; SUPPLYING FIXING OF ONE SEATER SCHOOL DESK WITH SHELF/STORAGE UNDER DESK WHICH ONE MADE BY CAST IRON,DESK TOP MADE BY 18MM THICK PRELAMINATED PARTICAL BOARD OF GRADE II TYPE III OF IS 12823/LATEST,TWO SEATER CLASSROOM DESK CUM BENCH, TOTAL SIZE OF BENCH : 600MM(L)X 950MM(D)X 760MM(H) DESK SIZE : 600MM (W) X 400MM (D) X 760MM (H) BENCH SIZE : 600MM (W) X 310MM (D) X 390 / 760MM (H) BACK SIZE : 600MM (W) X 150 MM (H), UNDER STRUCTURE-BLACK 9005 ERW PIPE (AS PER IS:7138) : 25X25X1.2MM SQUARE MS PIPE, OF THICKNESS 1.2MM IN BLACK EPOXY POLYESTER POWDER COATED TO THE THICKNESS 50-60 MICRONS(+/-5 MICRON) AT BASE WITH PLASTIC CAPS MADE OF PP COPOLYMER (3530 GRADE) ARE ALSO PROVIDED ON THE REAR FRAMES ADDING MORE AESTHETIC VALUE TO THE PRODUCT.</p> <p>* ADDITIONAL HORIZONTAL SUPPORTS OF M.S. C SECTIONS OF 1.5MM THICK ARE PROVIDED BELOW THE DESK &amp; SEAT.SHELF: 0.8MM THICK POWDER COATED M.S. SHEET BELOW THE DESK &amp; HOOKS ON EITHER SIDE OF DESK IN M.S. ROD OF DIA 6MM.TOP,SEAT AND BACK PANEL: 18MM THICK PRE LAMINATED BOARD WITH MACHINE PRESSED EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED DULY PASTED WITH THE ASSISTANCE OF EDGE BANDING MACHINE AT 200 DEGREE CELSIUS.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD ( WOOD PRODUCT ) OF GRADE II TYPE III OF IS 12823/LATEST.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>



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MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

21	DESK AND BENCH (2 Seater)	<p>MATERIAL : PRELAMINATED PARTICLE BOARD WITH MS BASE SIZE : 1200MM(L)X 950MM(D)X 760MM(H) , COLOUR : BEVERIAN BEECH / FINISH : MATTE / PRODUCT WEIGHT : 38 KG APPROX.</p> <p>* PROVIDING &amp; SUPPLYING FIXING OF TWO SEATER SCHOOL DESK WITH SHELF/STORAGE UNDER DESK WHICH ONE MADE BY CAST IRON,DESK TOP MADE BY 18MM THICK PRELAMINATED PARTICAL BOARD OF GRADE II TYPE III OF IS 12823/LATEST,TWO SEATER CLASSROOM DESK CUM BENCH, TOTAL SIZE OF BENCH : 1200MM(L)X 950MM(D)X 760MM(H) DESK SIZE : 1200MM (W) X 400MM (D) X 760MM (H) BENCH SIZE : 1200MM (W) X 310MM (D) X 390 / 760MM (H) BACK SIZE : 1200MM (W) X 150 MM (H), UNDER STRUCTURE-BLACK 9005 ERW PIPE (AS PER IS:7138) : 25X25X1.2MM SQUARE MS PIPE, OF THICKNESS 1.2MM IN BLACK EPOXY POLYESTER POWDER COATED TO THE THICKNESS 50-60 MICRONS(+/-5 MICRON) AT BASE WITH PLASTIC CAPS MADE OF PP COPOLYMER (3530 GRADE) ARE ALSO PROVIDED ON THE REAR FRAMES ADDING MORE AESTHETIC VALUE TO THE PRODUCT.</p> <p>* ADDITIONAL HORIZONTAL SUPPORTS OF M.S. C SECTIONS OF 1.5MM THICK ARE PROVIDED BELOW THE DESK &amp; SEAT.SHELF: 0.8MM THICK POWDER COATED M.S. SHEET BELOW THE DESK &amp; HOOKS ON EITHER SIDE OF DESK IN M.S. ROD OF DIA 6MM.TOP,SEAT AND BACK PANEL: 18MM THICK PRE LAMINATED BOARD WITH MACHINE PRESSED EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED DULY PASTED WITH THE ASSISTANCE OF EDGE BANDING MACHINE AT 200 DEGREE CELSIUS.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD ( WOOD PRODUCT ) OF GRADE II TYPE III OF IS 12823/LATEST.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THEMANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
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STATE HIGHER EDUCATION COUNCIL  
MEGHALAYA



# STATE HIGHER EDUCATION COUNCIL [SHEC]

## MEGHALAYA ::: SHILLONG

MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

22	DESK AND BENCH (3 Seater)	<p>MATERIAL : PRELAMINATED PARTICLE BOARD WITH MS BASE DESK SIZE : 1500MM (W) X 950MM (D) X 760MM (H) COLOUR : BEVERIAN BEECH / FINISH : MATTE / PRODUCT WEIGHT : 54 KG APPROX.</p> <p>* PROVIDING &amp; SUPPLYING FIXING OF THREE SEATER COLLEGE DESK WITH SHELF/STORAGE UNDER DESK WHICH ONE MADE BY CAST IRON,DESK TOP MADE BY 18MM THICK PRELAMINATED PARTICAL BOARD OF GRADE II TYPE III OF IS 12823/LATEST,TWO SEATER CLASSROOM DESK CUM BENCH, TOTAL SIZE OF BENCH : 1500MM(L)X 950MM(D)X 760MM(H) DESK SIZE : 1500MM (W) X 400MM (D) X 760MM (H) BENCH SIZE : 1500MM (W) X 310MM (D) X 390 / 760MM (H) BACK SIZE : 1500MM (W) X 150 MM (H), UNDER STRUCTURE-BLACK 9005 ERW PIPE (AS PER IS:7138) : 25X25X1.2MM SQUARE MS PIPE, OF THICKNESS 1.2MM IN BLACK EPOXY POLYESTER POWDER COATED TO THE THICKNESS 50-60 MICRONS(+/-5 MICRON) AT BASE WITH PLASTIC CAPS MADE OF PP COPOLYMER (3530 GRADE) ARE ALSO PROVIDED ON THE REAR FRAMES ADDING MORE AESTHETIC VALUE TO THE PRODUCT.</p> <p>* ADDITIONAL HORIZONTAL SUPPORTS OF M.S. C SECTIONS OF 1.5MM THICK ARE PROVIDED BELOW THE DESK &amp; SEAT.SHELF: 0.8MM THICK POWDER COATED M.S. SHEET BELOW THE DESK &amp; HOOKS ON EITHER SIDE OF DESK IN M.S. ROD OF DIA 6MM.TOP, SEAT, BACK &amp; MODESTY PANEL: 18MM THICK PRE LAMINATED BOARD WITH MACHINE PRESSED EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED DULY PASTED WITH THE ASSISTANCE OF EDGE BANDING MACHINE AT 200 DEGREE CELSIUS.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD ( WOOD PRODUCT ) OF GRADE II TYPE III OF IS 12823/LATEST.</p>
23	TEACHER'S DESK	<p>OFFICE DESK,STRUCTURE OF TABLE TOP RECTANGULAR SHAPE . PRIMARY WORK SURFACE OVER ALL SIZE IS 1200MM(L)X 600MM(D)X 750MM(H) 18MM THICK TABLE TOP MADE OF PRELAMINATED PARTICLE BOARD WORK SURFACE WITH THE EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE WITH THE HOT MELT GLUE .</p> <p>* PROVISION OF TABLE TOP SUPPORTED WITH AN UNDERSTRUCTURE OF MS SQUARE FRAME IN 25MM*25MM*0.9MM. WITH 2 NUMBER DRAWER.DRAWER ASSEMBLY CONSISTS OF DRAWER FRONT MADE OF 0.6MM CRCA SHEET, DRAWER TRAY OF 0.8MM CRCA SHEET.</p> <p>ALL METALLIC PARTS SHOULD BE EPOXY POLYESTER POWDER COATING TO THICKNESS OF 50 MICRON (APPROX)</p> <p>* 2 DRAWERS,IN PROVIDED WITH CETNRAI LOCK FOR SECURITY AND HANDLES ARE PROVIDED FOR EASY OF OPENING.</p> <p>OVERALL CONSTRUCTION OF 1DRAWERS IS 0.6 MM ALONG WITH FECIA OF DRAWERS.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD(WOOD PRODUCT) OF GRADE II TYPE III OF IS 12823/LATEST ,</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>



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**Vide Notification No. LL(B).78/2017/16, dated 27.04.2018**

24	MEDIUM BACK MESH CHAIR	<ul style="list-style-type: none"><li>* MEDIUM BACK 360° DEGRE REVOLVING CHAIR</li><li>* ALL OVER SIZE IS : 595MM(L)X 670MM(D)X 1125MM(H) ,</li><li>* THE CHAIR MADE OF FULL MESH IN BLACK COLOUR .</li></ul> IT WILL COMES IN MATTE FINISH ABOUT STYLE TYPE IS MODERN. DETAILS : <ul style="list-style-type: none"><li>* ARMS : FIXED PP ARMSREST .</li><li>* USE OF PLY: 12 MM THICK HOT PRESSED BWR PLYWOOD (IS GRADE - 303 FOR SEAT).</li><li>* SEAT: 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN SEAT ,</li><li>* BACK : FRAME OF DESIGN SHALL BE CURVED MADE OF TWO PIECES INJECTION MOULDED FRAME COVER WITH MESH .BACKREST SUPPORT ADJUSTABLE LUMBAR SUPPORT</li><li>* MECHANISM : SINGLE LOCKING MECHANISM .</li><li>* ONLY SEAT SIZE IS 670MM(L)X 595MM(D)X 470-570MM(H) , SEAT MAXIMUM HEIGHT IS 570MM &amp; MINIMUM HEIGHT IS 470MM &amp; BACK MAX HEIGHT IS @ 1125MM .</li><li>* GAS LIFT 100 MM TELESCOPIC HYDRAULIC</li><li>* BASE : NYLON BASE IS 620MM PITCH CENTER DIA (660MM WITH CASTORS) .</li></ul>
25	White Board	SUPER WHITE' WRITING GRADE RESIN COATED STEEL WRITING SURFACE CONFORMING TO INTERNATIONAL STANDARDS. A 100% SMOOTH AND 100% SCRATCH-FREE SURFACE ENSURES MAXIMUM PLEASURE OF WRITING. THE SURFACE CAN ALSO BE USED FOR STICKING MAGNETS OR MAGNET IMPREGNATED OBJECTS SATIN-FINISH ALLOY ALUMINUM (6063-T6) FRAME AND PRECISION ENGINEERED PAPER HONEYCOMB CORE TO MAKE THE BOARD 100% WARP-FREE AND 100% FLAT. CAN BE MOUNTED IN LANDSCAPE AS WELL AS PORTRAIT ORIENTATION ON A WALL WITH THE HELP OF BUILT-IN WALL HANGING CLIP. EXCELLENT ERASIBILITY WITH NO GHOST-MARKS, HIGH SCRATCH-RESISTANCE WITH EASY- WIPE PROPERTIES AND MAXIMUM READABILITY WITH MINIMUM GLARE MAKES THE GENIUS SERIES BOARDS AN IDEAL COMPANION FOR ALL TRAINING, TEACHING, DISPLAY AND LEARNING ACTIVITIES. MATERIAL: RESIN COATED STEEL WRITING SURFACE, ALLOY ALUMINUM FRAME, PAPER HONEYCOMB CORE & VIRGIN ABS CORNERS. SIZE OF THE BOARD: ( 180X120 CM).
<b>CONFERENCE ROOM</b>		
26	U - SHAPE MODERN DESIGN CONFERENCE TABLE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD SIZE : 1350MM(L)X 600MM(D)X 750MM(H), COLOUR : BROWN-BLACK OAK / FINISH : LAMINATED.</p> <ul style="list-style-type: none"><li>* PROVIDING &amp; SUPPLYING U - SHAPE MODERN DESIGN CONFERENCE TABLE &amp; IN BETWEEN U SHAPE TABLE TOP LENGTH IS @ 1350 MM, TABLETOP OFFERS YOU A GENEROUS WORKSPACE, DESK PRIMARY WORK SURFACE USE PREMIUM QUALITY MATERIALS OVER ALL SIZE IS 1350MM(L)X 600MM(D)X 750MM(H) TABLE TOP MADE OF 36MM THICK WHICH GIVE MORE SURFACE AREA FOR WORK , MACHINE MADE MODULAR FURNITURE MADE PRELAMINATED PARTICLE BOARD OF GRADE II TYPE III OF IS 12823/LATEST,</li><li>* CONSTRUCTION PROVISION OF CONFERENCE TABLETOP SUPPORTED WITH 18MM THICK SIDE PANELS IN BROWN-BLACK OAK COLOUR MADE BY PRELAMINATED PARTICLE BOARD AND BELOW THE TOP 18MM THICK PRELAM PARTICLE BOARD MODESTY PANEL. OUR WORK SURFACE FURNITURE IS FINISHED WITH EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE, FIXED WITH HOT MELT GLUE.</li><li>* THREE LAYER PRELAMINATED PARTICLES BOARD (WOOD PRODUCT) OF GRADE II TYPE III OF IS 12823/LATEST,</li><li>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER</li></ul>





# STATE HIGHER EDUCATION COUNCIL [SHEC]

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MEGHALAYA ACT NO.3 OF 2018

Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

		CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK, FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".
27	HIGH BACK LEATHERETTE CHAIR	<ul style="list-style-type: none"><li>* HIGH BACK 360° DEGRE REVOLVING CHAIR</li><li>* ALL OVER SIZE IS : 590MM(L)X 505MM(D)X 1280MM(H) ,</li><li>*THE CHAIR MADE OF FULL LEATHERETTE IN BLACK COLOUR . IT WILL COMES IN MATTE BLACK FINISH IN CONTEMPORARY STYLE .</li><li>DETAILS :</li><li>* ARMS : CHROME FINISH ARMS WITH PU PADDING .</li><li>* USE OF PLY: 12 MM THICK HOT PRESSED BWR PLYWOOD (IS GRADE - 303 FOR SEAT AND BACK) .</li><li>* SEAT: 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN SEAT ,</li><li>* BACK : 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN BACK .</li><li>BACKREST SUPPORT FOAM DESIGN BASED ON SYMMETRICAL LUMBAR SUPPORT</li><li>* MECHANISM : KNEE TILT MECHANISM .</li><li>* ONLY SEAT SIZE IS 505MM(L)X 505MM(D)X 610MM(H) &amp; THE BACK SIZE IS 590MM(L)X 710MM(H)</li><li>SEAT MAXIMUM HEIGHT IS 610MM &amp; MINIMUM HEIGHT IS 510MM &amp; BACK HEIGHT FROM FLOOR MAXIMUM HEIGHT IS 1280MM &amp; MINIMUM HEIGHT IS 1180MM</li><li>* GAS LIFT 100 MM TELESCOPIC HYDRAULIC</li><li>* BASE : 650 MM CHROME BASE WITH SMOOTH CASTORS .</li></ul>
28	LOW BACK LEATHERETTE CHAIR	<ul style="list-style-type: none"><li>* LOW BACK 360° DEGRE REVOLVING CHAIR</li><li>* ALL OVER SIZE IS : 660MM(L)X 505MM(D)X 1105MM(H) ,</li><li>*THE CHAIR MADE OF FULL LEATHERETTE IN BLACK COLOUR . IT WILL COMES IN MATTE BLACK FINISH IN CONTEMPORARY STYLE .</li><li>DETAILS :</li><li>* ARMS : CHROME FINISH ARMS WITH PU PADDING .</li><li>* USE OF PLY: 12 MM THICK HOT PRESSED BWR PLYWOOD (IS GRADE - 303 FOR SEAT AND BACK) .</li><li>* SEAT: 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN SEAT ,</li><li>* BACK : 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN BACK .</li><li>BACKREST SUPPORT FOAM DESIGN BASED ON SYMMETRICAL LUMBAR SUPPORT</li><li>* MECHANISM : KNEE TILT MECHANISM .</li><li>* ONLY SEAT SIZE IS 525MM(L)X 525MM(D)X 610MM(H) &amp; THE BACK SIZE IS 660MM(L)X 570MM(H)</li><li>SEAT MAXIMUM HEIGHT IS 610MM &amp; MINIMUM HEIGHT IS 510MM &amp; BACK HEIGHT FROM FLOOR MAXIMUM HEIGHT IS 1105MM &amp; MINIMUM HEIGHT IS 1005MM</li><li>* GAS LIFT 100 MM TELESCOPIC HYDRAULIC</li><li>* BASE : 650 MM CHROME BASE WITH SMOOTH CASTORS .</li></ul>
	OFFICE ROOM	
29	OFFICE TABLE	OVERALL SIZE OF DESK 1350MM (L) X 750MM (W) X 750MM (H)& SIDE STORAGE UNIT OF SIZE 900111M (L) X 450MM (W) X 750MM (H)
30	MEDIUM BACK MESH CHAIR	<ul style="list-style-type: none"><li>* MEDIUM BACK 360° DEGRE REVOLVING CHAIR</li><li>* ALL OVER SIZE IS : 622MM(L)X 490MM(D)X 1105MM(H) ,</li><li>*THE CHAIR MADE OF FULL MESH IN BLACK COLOUR . IT WILL COMES IN MATTE FINISH ABOUT STYLE TYPE IS MODERN.</li><li>DETAILS :</li><li>* ARMS : FIXED PP ARMSREST .</li></ul>



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		<p>* USE OF PLY: 12 MM THICK HOT PRESSED BWR PLYWOOD (IS GRADE - 303 FOR SEAT).</p> <p>* SEAT: 40 ± 2 MM THICK POLYURETHANE FOAM WITH DENSITY 32 (±3) KG PER CU METER FOR BEST QUALITY CUSHIONING IN SEAT ,</p> <p>* BACK : FRAME OF DESIGN SHALL BE CURVED MADE OF TWO PIECES INJECTION MOULDED FRAME COVER WITH MESH .BACKREST SUPPORT ADJUSTABLE LUMBAR SUPPORT</p> <p>* MECHANISM : SINGLE LOCKING MECHANISM .</p> <p>* ONLY SEAT SIZE IS 660MM(L)X 610MM(D)X 470-570MM(H) .</p> <p>SEAT MAXIMUM HEIGHT IS 570MM &amp; MINIMUM HEIGHT IS 470MM &amp; BACK MAX HEIGHT IS @ 1130MM</p> <p>* GAS LIFT 100 MM TELESCOPIC HAUDRAULIC</p> <p>* BASE : 650MM NYLON BASE WITH SMOOTH CASTORS</p>
31	STEEL GLASS DOOR ALMIRA	<p>FOR Library / Office AREA</p> <p>SUPPLY AND INSTALLATION OF GLASS-DOOR STORAGE OF SIZE 916 MM (W) X 486MM (D) X 1980MM (H). IT SHOULD HAVE SHELFTHICKNESS OF 0.7MM, BACK THICKNESS OF 0.8MM, DOOR THICKNESS OF 0.8MM (HIGH YIELD STRENGTH) WITH CLEAR GLASS OF 3.0MM THICK AND ALL OTHER COMPONENTS SHALL HAVE A THICKNESS OF 0.9MM. THESE COMPONENTS SHALL BE MADE OF CRCA STEEL SHEET 'D' GRADE HIGH YIELD STRENGTH AS PER IS 5 13 :2008 THE GLASS DOOR STONVEL SHALL HAVE A SS HANDLE AND A TWO-WAY LOCKING MECHANISM WITH SHOOTING BOLT. IT SHOULD HAVE A HEIGHT-WISE ADJUSTABLE SHELF MOUNTING WHICH SHALL HAVE A UNIFORMLY DISTRIBUTED LOAD CAPACITY OF MAX 40 KG. IT SHOULD ALSO HAVE A MIO SCREW TYPE LEVELLER WITH HEX PLASTIC BASE.ALL METAL COMPONENTS WOULD BE EPOXY POLYSTER POWDER COATED DFT 50-60 MICRON CONFIRMING TO IS 13871 :1993</p>
32	Medicine Shelf	<p>MATERIAL : MILD STEEL, SIZE 900MM(L)X 450MM(D)X 1980MM(H) COLOUR : MUNSHEL GREY &amp; SAMOK GREY / FINISH : EPOXY POLYESTER, WEIGHT OF PRODUCT : 73 KG APPROX, CONSTRUCTION : CO2 WELDED .</p> <p>* PROVIDING &amp; SUPPLING PLACING POSITION OF MODULAR FILING STORAGE BODY MADE OUT IN 22 GAGUE(0.8MM) &amp; DOOR 20 GAGUE(1 MM) CRCA SHEET. 4 ADJUSTABLE SHELVE IN 22 GAGUE(0.8MM) &amp; PEDESTAL 18 GAGUE 1.2 MM CRCA SHEET.HAVING FOUR SHELVES MAKING FIVE COMPARTMENT, FITTED WITH MS BODY LOCK &amp; HANDLE. WITH 2 NUMBERS OF GLASS DOOR SHUTTERS , THE GLASS USED SHALL BE 4MM THICK CLEAR.THESE COMPONENTS SHALL BE MADE OF CRCA 'D' GRADE HIGH YIELD STRENGTH AS PER IS:513 &amp; IS:304 GRADE. THE GLASS DOOR STORWEL SHALL HAVE A BRASS HANDLE AND A 2 WAY LOCKING MECHANISM WITH SHOOTING BOLT .</p> <p>* UNIFORMLY DISTRIBUTED LOAD CAPACITY OF EACH SHELF SHALL BE 30 KG MAXIMUM. EACH RACK SHALL BE PROVIDED WITH STIFFENER AT BOTTOM FOR STRENGTH. THE ENTIRE BODY PANEL AND SHELF SHALL BE MADE OF HIGH YIELD STRENGTH,THE COMPLETE STEEL STRUCTURE SHALL BE CONSTRUCTED BY WELDING AND PROVIDE FINISHING WITH EPOXY POLYESTER POWDER COATED TO THE THICKNESS 50-60 MICRONS(+/-5 MICRON).</p> <p>* PACKING : 5 PLY CORRUGATED BOX OR PLY,EPE FOAM WITH ALL FOUR CORNER &amp; SIDES PROTECTION PROPERLY PP STRAPED,PACKET COMES I N 1 BOX</p> <p>SIZE.OF.PACKET : PKT NO.1) 915MM(L)X 465MM(D)X 1845MM(H), CUBIC METER : 0.785001375 , STORAGE DELIVERED IN : ASSEMBLED.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO,</p>



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**Vide Notification No. LL(B).78/2017/16, dated 27.04.2018**

		AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER/MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".
33	Shelf (Book Rack)	<p>FILING CABINET MATERIAL : MILD STEEL SIZE : 838MM(L)X 305MM(D)X 1676MM(H) , COLOUR : MUNSHEL GREY &amp; SAMOK GREY / FINISH : EPOXY POLYESTER, WEIGHT OF PRODUCT : 50 KG APPROX, CONSTRUCTION : CO2 WELDED.</p> <p>* PROVIDING &amp; SUPPLYING PLACING POSITION OF MODULAR SLOTTED ANGLE RACK OF STEEL BOOKCASE HAVING 4 DOORS AND THREE WAY BOLTING DEVICE CONTROLLED BY LOCK. TYPE OF LOCK: THREE WAY BOLTING DEVICE CONTROLLED BY LOCK, THICKNESS OF MS SHEET USED FOR SHUTTER: 0.7 MM.THESE COMPONENTS SHALL BE MADE OF CRCA 'D' GRADE HIGH YIELD STRENGTH AS PER IS:513 &amp; IS:304 GRADE.</p> <p>* THICKNESS OF MS SHEET USED FOR SHELF: 0.7 MM, THICKNESS OF MS SHEET USED FOR TOP,BOTTOM, BACK AND SIDES: 0.7 MM, MATERIAL OF HANDLE: CAST BRASS, THICKNESS OF TRANSPARENT GLASS IN SHUTTERS: 4.0 MM, THE COMPLETE STEEL STRUCTURE SHALL BE CONSTRUCTED BY WELDING AND PROVIDE FINISHING WITH EPOXY POLYESTER POWDER COATED TO THE THICKNESS 60-80 MICRON.</p> <p>* PACKING : 5 PLY CORRUGATED BOX OR PLY,EPE FOAM WITH ALL FOUR CORNER &amp; SIDES PROTECTION PROPERLY PP STRAPED,PACKET COMES IN 1 BOX SIZE.OF.PACKET : PKT NO 1)- 853MM(L)X 320MM(D)X 1691MM(H), CUBIC METER : 0.46157536 , STORAGE DELIVERED IN : ASSEMBLED.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER/MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>

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Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

34	Reception Desk	<p>MODERN DESIGN RECEPTION DESK MATERIAL : ENGINEERED WOOD - PARTICLE BOARD SIZE : 2400 MM(L)X 750 MM(D)X 750 - 1200 MM(H) COLOUR : FROSTY WHITE / FINISH : LAMINATED.</p> <p>* PROVIDING AND SUPPLYING MODERN DESIGN RECEPTION DESK A COMBINATION OF METAL AND WOOD MAKE THE PRODUCTS UTILE AND A DELIGHT.TIMELESS DESIGN THAT ELEVATES YOUR OFFICE SPACE STRUCTURE OF SPACIOUS RECEPTION DESK,TABLE TOP OFFERS YOU A GENEROUS LOOK FOR WORK SURFACE USE PREMIUM QUALITY MATERIALS OVER ALL SIZE IS 2400 MM(L)X 750 MM(D)X 750 MM(H) OF 25MM THICK WHICH GIVE MORE SURFACE AREA FOR WORK ,TABLE TOP MADE OF PRELAMINATED PARTICLE BOARD &amp; TABLE TOP TO BASE SUPPORTED WITH 36MM THICK PRELAM PARTICLE BOARD OF GRADE II TYPE III OF IS 12823/LATEST,.</p> <p>* COMBINATION CONSTRUCTION OF RECEPTION DESK ABOVE TABLE 18 MM THICK COUNTER TOP WITH 18 MM THICK COUNTER TOP,OVERALL RECEPTION DESK HEIGHT IS @ 1200MM WITH COUNTER TOP,TOP MADE 25 MM THICK PRELAM PARTICLE BOARD WORK SURFACE WITH THE EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK PVC EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED WITH HOT MELT GLUE &amp; THE BELOW MAIN DESK SHOULD CONTAIN IN BUILT FIXED POWDER COATED TELESCOPIC CHANNELS TO PULL OUT BLACK PVC POWDER COATED KEYBOARD TRAY.1 MOBILE PEDESTAL (2 DRAWERS + 1 FILING CABINET ) SIZE IS 450 MM(L)X 450 MM(D)X 600 MM(H) IN PROVIDED WITH CENTRAL LOCK FOR SECURITY AND HANDLE'S ARE PROVIDED FOR EASY OF OPENING &amp; PEDESTAL MOVE ON NYLON CASTORS . BELOW SIDE AND MIDDLE PANNELS</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD (WOOD PRODUCT) OF GRADE II TYPE III OF IS 12823/LATEST ,</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK, FSC CERTIFICATE. THE BIDDER/MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
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Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

35	Bag deposit Counter	<p>VAULT/4/12/CM PERSONAL LOCKERS MATERIAL : MILD STEEL SIZE : 1100MM(L)X 450MM(D)X 1830MM(H) COLOUR : MUNSHEL GREY &amp; SAMOK GREY / FINISH : EPOXY POLYESTER, WEIGHT OF PRODUCT : 111 KG APPROX, CONSTRUCTION : CO2 WELDED. * PROVIDING &amp; SUPPLYING PLACING POSITION OF MODULAR TWELVE DOORS SINGLE UNIT PERSONAL LOCKER LOCKING SHALL HAVE STAPLE LOCK . MATERIAL SHALL BE CRCA 0.6 MM THICKNESS . CONSTRUCTION SHALL BE CO2 WELDED CONSTRUCTION, SHELF SHALL BE UNIFORMLY DISTRIBUTED LOAD CAPACITY PER EACH SHELF LEVEL IS 30 KG MAXIMUM.THESE COMPONENTS SHALL BE MADE OF CRCA 'D' GRADE HIGH YIELD STRENGTH AS PER IS:513 &amp; IS:304 GRADE. * FEATURES : INDEX HOLDER &amp; AIR VENTILATION HOLE, FOLDABLE CAM LOCK WITH KEYS, CONCEALED METAL HINGES W/O EXPOSED BRACKETS (BETTER SECURITY). * FINISH SHALL BE EPOXY POLYESTER POWDER COATED TO THE THICKNESS OF 50 MICRONS . HANDLE/LABEL HOLDER SHALL BE APPEALING SNAP FIT ABS PLASTIC HANDLE . VENTILATION SHALL BE ATTRACTIVE PUNCHED PATTERN FOR VENTILATION.THE FINISHING SHALL INCLUDE EPOXY POWDER COATED TO THE THICKNESS OF 50 MICRONS (+/- 10). * PACKING : 5 PLY CORRUGATED BOX OR PLY,EPE FOAM WITH ALL FOUR CORNER &amp; SIDES PROTECTION PROPERLY PP STRAPED,PACKET COMES IN 1 BOX SIZE.OF.PACKET : PKT NO 1) 1115MM(W)X 465MM(D)X 1845MM(H), CUBIC METER : 0.956586375 , STORAGE DELIVERED IN : ASSEMBLED. * THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER/MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
	<b>LIBRARY</b>	
36	LIBRARY TABLE	<p>SUPPLY AND INSTALLATION OF LIBRARY TABLE IN SIZES OF 2400MM (L) X 900MM (W) X 750MM (H) CONSISTING OF FOLLOWING SPECIFICATION:WORK TOP - WORK TOP SHALL BE MADE OF 25MM THICK PRE-LAMINATED PARTICAL BOARD WITH DECORATIVE LAMINATION ON ONE SIDE AND BALANCING LAMINATION ON OTHER SIDE CONFIRMING TO IS 12823: 1990, ALONG WITH 2 MM THICK MACHINE PRESSED PVC EDGE BANDING GLUED WITH INDUSTRIAL ADHESIVE AND MONOLITHICALLY DIFFUSED WITH BOARD ON EXPOSED EDGES. UNDERSTRUCTURE SUPPORTING FRAME SHALL CONSISTS OF THREE METAL C-LEGS (TWO AT EITHER ENDS AND ONE IN MIDDLE OF TABLE) AND JOINED BY TWO NUMBERS HORIZONTAL CONNECTOR MADE OF TUBULAR SECTION 40MM X 40MM X 1.6MM (WALL THICKNESS) CONFIRMING TO IS 4923:1997. THE ENTIRE METAL FRAME SHALL BE FINISHED WITH EPOXY POLYESTER POWDER COATED DFT 50-60 MICRON. C-TYPED METAL LEGS SHALL BE KEPT 150 MM INSIDE FROM FROM END OF TABLE. LEGS SHALL BE FITTED TO THE GROUND WITH M8 SCREW LEVELER WITH THE HEIGHT ADJUSTMENT UP TO 12MM TO 15MM.</p>



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37	ONE SIDE BOOK SHELF	OVERALL SIZE 900WX300DX21 OOHMM, TOP MADE UP OF 18MM THICK POSTLAM PLYWOOD WITH PVC EDGE BANDING, SIDE PANEL MADE UP OF 18MM THICK POSTLAM PLYWOOD WITH PVC EDGE BENDING, SKIRTING MADE UP OF 18MM THICK POSTLAM PLYWOOD WITH PVC EDGE BENDING, BACK PANEL MADE UP OF 18MM THICK POSTLAM PLYWOOD, ONE NUMBER OF DRAWER, SHELF MADE UP OF 18MM THICK POSTLAM PLYWOOD WITH PVC EDGE BENDING, ALL WOODEN PANELS FIX JOINTS WITH MINIFIX DOWELS & OTHER FITTING EQUIPMENT, ALL WOODEN PANELS PRIME QUALITY BOARD WITH ISI MARKED.
38	VISITOR CHAIR	OVERALL DIMENSION:- W600±10 X 600D X 890H +10 MM, SEAT OF MEDIUM BACK VISITOR CHAIR IS MADE OF 12MM THICK HOT PRESSED PLYWOOD PASTED WITH PU MOULDED FOAM WITH FABRIC UPHOLSTERY ON SEAT, USED PU MOULDED FOAM ON SEAT OF D-45 KG/M3, BACK OF MEDIUM BACK CHAIR IS MADE OF INJECTION MOULDED PP MATERIAL STRUCTURE WITH MESH FABRIC, SEAT SIZE:- 460W ±10 X 470D X 60THICK. +5 MM, BACK SIZE:- 440W ±10 X 470H ±10, ARMREST:- FIXED PP ARMREST, UNDER STRUCTURE :CANTILEVER FRAME MADE POWDER COATING OF ROUND PIPE 14 GAUGE THICKNESS WITH PLASTIC BUSHES.
39	OPAC Table	OPAC table -size:39"hx24"wx24"d. Table top made of 18mm thk prelaminated particle board with PVC edge banding. Side panel made of 18mm thk prelaminated particle board with PVC edge banding. Modesty made of prelaminated particle board with PVC edge banding. Provision of shelf under table top of 18mm thk prelaminated particle board.
40	Periodicals	Supplying and placing in position of magazines library storage material: prelaminated particle board, storage size: 800 mm (L)x 300 mm (D)x 1800 mm (H). Colour: cherry & finish: laminate finish. * providing & supplying placing position of modular storage top shall be made from 25 mm thick prelaminated particle board. * While rest of the sides as well as shelves and shutter to be made up of 18 mm thick prelaminated particle board. Machine pressed exposed edges shall be finished with 2mm thick edge binding tape of matching colour and shade fixed duly pasted with the assistance of edge banding machine at 200 degree celsius. * Storage with construction is open carcasses storage with 3 adjustable shelves per shelf 490 mm (d) x 430 mm (h), over all height of product is @ 1800mm. * Three layer prelaminated particles board (wood product) of grade ii type iii of is 12823/latest. The seller / company should be NABCB certified iso-9001:2015, iso-14001:2015, ohsas-18001:2007, iso-45001:2018, iso-50001:2018, iso 37001-2016 and iso-13485. Other certifications ul- green guard gold (with more than 100 products approved), GRIHA, GREENPRO, INDIAN design mark, AIOTA, FSC & SEDEX certified. The bidder/manufacturer should preferably also be a member of BIFMA and one or more products of the OEM should be certified as BIFMA compliant as well as BIFMA level-1(one) certified and an official product link/screenshot of the product listing's must be provided from www.bifma.org" in each case.
41	Double Sided Open Rack	Rack top made of 18mm THK PRELAM MDF board with edges sealed with 2mm THK PVC edge banding. Side panels and shelves are made of 18mm THK PRELAM MDF board with edges sealed with 2mm THK PVC edge banding * The seller / company should be NABCB certified iso-9001:2015, iso-14001:2015, ohsas-18001:2007, iso-45001:2018, iso-50001:2018 and iso-13485. Other certifications ul- green guard gold (with more than 100 products approved), GRIHA, GREENPRO, INDIAN design mark, AIOTA, FSC & SEDEX certified. The bidder/manufacturer should preferably also be a member of BIFMA and one or more products of the OEM should be certified as BIFMA compliant as well as BIFMA level-1(one) certified and an official product link/screenshot of the product listing's must be provided from www.bifma.org".
<b>COMPUTER ROOM</b>		
42	COMPUTER ROOM WORKSTATION	SUPPLYING AND INSTALLATION OF KNOCK DOWN TYPE DUAL COMPUTER WORK STATION OF UNIT SIZE 1500MM (L) X 600MM (W) X 750MM (H) FOR TWO STUDENTS WORK TOP- WORK TOP SHALL BE MADE 25MM THICK PRELAM PARTICLE BOARD WITH DECORATIVE LAMINATION ON ONE SIDE AND BALANCING LAMINATION ON OTHER SIDE CONFIRMING TO IS 12823: 1990 WITH 2MM THICK MACHINE PRESSED PVC EDGE BANDING GLUED WITH INDUSTRIAL ADHESIVE AND MONOLITHICALLY DIFFUSED WITH BOARD ON ALL SIDES.



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		<p>UNDERSTRUCTURE SUPPORTING FRAME CONSIST OF 2 METAL C LEGS ON EITHER ENDS OF TABLE SUPPORT FRAME MADE OF 50MM X 50MM X 1.6 MM (WALL THICKNESS) MS ERW TUBE AND ONE NUMBER WIRE CARRIER LEG AT MIDDLE OF X 50MM X 1.6MM (WALL THICKNESS), 4 NUMBERS HORIZONTAL CONNECTOR OF 40MM X 40MM X 1.6MM THICK MS PIPE BETWEEN SUPPORTING VERTICAL LEGS. THE MS PIPES SHALL BE FINISHED WITH EPOXY POWDER COATED WITH DFT OF 50-60 MICRON CONFIRMING TO IS 13871:1993. THE LEGS SHALL BE FITTED TO THE GROUND WITH M8 SCREW LEVELER WITH THE HEIGHT ADJUSTMENT UP TO 15MM.</p> <p>WIRE MANAGEMENT-THE VERTICAL [ELECTRICAL DUCT &amp; HORIZONTAL CABLE TRAY (WIRE CARRIERS) ARE MADE OF CRCA STEEL SHEET &amp; FIXED TO THE UNDERSTRUCTURE BELOW WORKTOP WITH SPECIALLY DESIGNED BRACKETS. PROVISION FOR FIXING SWITCH PLATES ARE PROVIDED IN THE CABLE TRAY FOR EASY ACCESS THROUGH WIRE MANGAER OR PVC GROMMET.</p> <p>SCREENS / PRIVACY PANEL: - SCREEN HEIGHT WILL BE 300MM ABOVE WORK-TOP MADE OF PRELAM PARTICLE BOARD/WHITE BOARD ALTERNATIVELY AS APPROVED BY ENGINEER-IN-CHARGE. IN ADDITION PRIVACY PANEL OF 300 MM HEIGHT, ON WORK TOP, SHALL BE PROVIDED BETWEEN TWO WORKSTATION.</p>
	<b>STAFF ROOM</b>	
43	12 SEATER MEETING TABLE	<p>SUPPLYING AND INSTALLATION OF KNOCK DOWN TYPE OF 12 SEATER MEETING TABLE OF OVERALL SIZE 3600 X 1350 (MAXIMUM) X 750 MM (KNOCK DOWN TYPE). TABLE TOP SHALL BE MADE OF 25MM THICK PRE-LAMINATED PARTICAL BOARD WITH DECORATIVE LAMINATION ON ONE SIDE AND BALANCING LAMINATION ON OTHER SIDE WHEREAS THE GABLE ENDS SHALL BE OF 25MM THICK PRE-LAMINATED PARTICAL BOARD WITH DECORATIVE LAMINATION ON BOTH SIDE ALONGWITH 2MM THICK MACHINE PRESSED PVC EDGE BANDING GLUED WITH INDUSTRIAL ADHESIVE AND MONOLITHICALLY DIFFUSED.</p> <p>SUPPORTING UNDERSTRUCTURE CONSISTS OF 2 METAL C LEGS ON EITHER ENDS OF TABLE SUPPORT FRAME MADE OF 50MM X 50MM X 1.6 MM (WALL THICKNESS) MS ERW TUBE AND ONE NUMBER WIRE CARRIER LEG AT MIDDLE OF 50MM X 50MM X 1.6MM (WALL THICKNESS), 4 NUMBERS HORIZONTAL CONNECTOR X 40MM X 1.6MM THICK MS PIPE BETWEEN SUPPORTING VERTICAL LEGS. ALL THE MS PIPES AND SHEET SHALL BE FINISHED WITH EPOXY POWDERCOATED OF DFT 50-60MICRON. THE 'C' TYPED METAL LEGS SHALL BE KEPT 150MM INSIDE FROM OUTER EDGE OF TABLE TOP. WIRE MANAGEMENT - THE VERTICAL (STAKE) &amp; HORIZONTAL (CABLE TRAY) WIRE CARRIERS ARE PLACED BELOW WORKTOP, MADE UP OF CRCA STEEL SHEET WITH EPOXY POWDER COATING &amp; FIXED TO THE UNDERSTRUCTURE WITH SPECIALLY DESIGNED BRACKETS, INCLUDING PROVISION OF PLACING SWITCH PLATES/GROMMET IN THE CABLE TRAY .</p>
	<b>LAB</b>	
44	WALL LAB TABLE	<p>SUPPLY AND INSTALLATION OF CHEMISTRY ALONG THE WALL LAB TABLE OF SIZE <b>1800(L) X 750(W) X 860(H)</b> (9 NO) WITH SPECIFICATION AS UNDER: OVERALL SIZE 1800W X 750D X 850H. STORAGE BOX SIZE 1800W X 750D X 850H1 X 1550H2 . 1 NOS. REAGENT RACK SIZE 1300W X 700H. CHEMISTRY ISLAND LAB TABLE OF SIZE X 1500(W) X 860(H) (2 NO) WITH SPECIFICATION AS UNDER: OVERALL SIZE 1800W X 1500D X 850H1. STORAGE BOX SIZE 1800W X 1500D X 850H1 X 1550H2. 1 NOS. REAGENT RACK SIZE 1300W X 300D X 700H. BOX OF STORAGE ( ID + 2S ) 0.8MM MS SHEET POWDER COATED . STORAGE PER BOX SIZE WITHOUT GRANITE 600W X 570D X 713H USING 100MM PVC LEG SUPPORTED. STORAGE UPPER TOP 19MM THICK GRANITE TOP ALL JOINTS WILL BE FILLED WITH SILICON SEALANT. INNOVATE 02 MADE OF 0.8MM THICK CRCA PRIME QUALITY MS SHEET WITH APPROVED</p>





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		<p>POWDER COATED SHADE. ALL CABINETS BODIES SHALL BE OF OVER CLOSING DESIGN COMPONENTS PARTS CUT &amp; SHAPED ENTIRELY ON CNC FABRICATING MACHINES WITH CONSTRUCTION. METAL STORAGE BODIES SHALL BE NEATLY JOINTED TOGETHER WITH ACCURATELY MATCHING SIDES AVOIDING ANY GAPS. SHUTTER MADE OF 0.8MM THICK POWDER COATED MS SHEET PROVIDING WITH HANDLES. DRAWER MOVE ON SLIDING TELESCOPIC CHANNEL. REAGENT RACK STRUCTURE SIDE PANEL MADE OF CRCA 1.2MM 25X25 SQUARE METAL PIPE WELDED WITH 0.8MM THICK METAL SHEET &amp; SHELVES ARE MADE BY WOODEN &amp; METAL SHEET WITH ADDED SWITCH &amp; SOCKET INNOVATE GRANITE TOP FLUSHED WITH SINK-UNIT &amp; TAP. INSTALLATION OF ALL UTILITY SERVICE OUTLETS ACCESSORY FITTINGS, PLUMBING, ELECTRICAL SWITCHES &amp; FITTINGS IDENTIFIED ON DRAWINGS AS MOUNTED ON THE LABORATORY FURNITURE. ALL METALLIC PANELS SCREW WITH NUT BOLT &amp; RIVETING. ALL METAL PIECES SHALL BE WELDED PROPERLY STRONGLY AND CONFORMITY WITH REGULATIONS. CO2 WELDING SHALL BE USED. ALL METAL SHALL BE COATED AFTER BEING TREATED WITH AT LEAST THREE STAGES AND CLEANED FROM OIL, GREASE, DUST AND OTHER DIRT USING SPECIAL THERMAL CONTROL COATING FOR METAL FURNITURE TO FORM A LAYER OF BASE COATING OF (IRON PHOSPHATING) (0.4 — 0.8) GM/M2 . AUTOMATIC SPRAY COATING SHALL BE APPLIED TO BE FOLLOWED BY A DRYING PROCESS IN A THERMAL FURNACE WITH SUITABLE TEMPERATURE AND TIME FOR THE PROCESS. THICKNESS OF COATING (40 — 50) MICRON.</p>
45	LAB STOOL	<p>SUPPLY AND INSTALLATION OF LAB STOOL SEAT REVOLVING STOOL WITH BACKREST OVERALL DIMENSION: 4 IOW +10 X 4 IOD X 820H MM, SEAT OF CHAIR IS MADE OF 12MM THICK HOT PRESSED PLYWOOD PASTED WITH HIGH DENSITY PU FOAM &amp; LEATHERETTE UPHOLSTERY, BACK IS MADE OF 12MM THICK HOT PRESSED PLYWOOD PASTED WITH PU FOAM D -40 KG/M3 , H-20 SEAT AND BACK FIXED THROUGH METAL POWDER COATED SPINE COVERED WITH PLASTIC COVER, SEAT SIZE: 400W ±10 X 400D ±10 X 75THICK. ±5 MM, BACK SIZE: 450W ±10 X 240H ±10 X 50THICK. +5MM, GROUND TO SEAT HEIGHT-440-560MM, MECHANISM:- MACHANISM DESIGN WITH FEATURES OF REVOLVING AT 360 DEGREE . MACHANISM PROVIDED UPRIGHT POSITION LOCKING, SEATING HEIGHT CAN BE ADJUSTED WITH A PNEUMATIC GAS LIFT, GASLIFT: LIFT -USED GASLIFT OF 90 MM SIZE OF CLASS-IV GRADE WITH PLASTIC BELLOW COVER, CHAIR BASE &amp; WHEELS: METAL CHROME PLATED CHAIR BASE MADE OF 2.5MM THICK METAL CHROME PLATED STEEL FRAME, BASE CONSISTS OF 5 PRONGS WITH 560±5 MM PITCH CIRCLE DIAMETER, 50MM DIA. BLACK NYLON - TWIN WHEEL PIN CASTOR.</p>
46	Drawing tables	<p>SUPPLY AND INSTALLATION OF TABLE IN SIZES OF 2400MM (L) X 900MM (W) X 750MM (H) CONSISTING OFFOLLOWING SPECIFICATION: WORK TOP - WORK TOP SHALL BE MADE OF 25MM THICK PRE-LAMINATED PARTICAL BOARD WITH DECORATIVE LAMINATION ON ONE SIDE AND BALANCING LAMINATION ON OTHER SIDE CONFIRMING TO IS 12823: 1990, ALONG WITH 2 MM THICK MACHINE PRESSED PVC EDGE BANDING GLUED WITH INDUSTRIAL ADHESIVE AND MONOLITHICALLY DIFFUSED WITH BOARD ON EXPOSED EDGES.</p> <p>UNDERSTRUCTURE SUPPORTING FRAME SHALL CONSISTS OF THREE METAL C-LEGS (TWO AT EITHER ENDS AND ONE IN MIDDLE OF TABLE) AND JOINED BY TWO NUMBERS HORIZONTAL CONNECTOR MADE OF TUBULAR SECTION 40MM X 40MM X 1.6MM (WALL THICKNESS) CONFIRMING TO IS 4923:1997. THE ENTIRE METAL FRAME SHALL BE FINISED WITH EPOXY POLYSTER POWDER COATED DFT 50-60 MICRON. C-TYPED METAL LEGS SHALL BE KEPT 150 MM INSIDE FROM FROM END OF TABLE. LEGS SHALL BE FITTED TO THE GROUND WITH M8 SCREW LEVELER WITH THE HEIGHT ADJUSTMENT UP TO 12MM TO 15MM.</p>





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	<b>AUDITORIUM</b>	
47	AUDITORIUM CHAIR	<p>SUPPLYING AND PLACING IN POTISION OF MODERN DESIGN AUDITORIUM CHAIR MATERIAL : FABRIC WITH METAL STRUCTURE / STYLE : MODERN, COLOUR : RED / FINISH : MATTE / MECHANISM : PUSH BACK</p> <p>SUPPLYING AND PLACING EXCLUSIVE PREMIUM FABRIC MODERNIST CLASSIC DESIGN AUDITORIUM CHAIR SIZE IS (L)650MM X (D)460MM X (H)1000MM WITH METAL FRAMING MAKES IT WARP AND SCRATCH RESISTANT, COMFORTABLE SEAT DEPTH &amp; HEIGHT DESIGNED KEEPING MODERN INDIAN LIFESTYLE IN MIND, WRAPPED IN BUTTERY-SOFT FABRIC, THE PANELLED BACK AND CUSHIONED ARMREST IS MOULDED PU FOAM COVERD WITH FABRIC IN BLACK COLOUR .DESIGNED WITH MODERNITY &amp; ELEGANCE, CHOOSE THE OPTION THAT SUITS YOUR AUDITORIUM HALL</p>
48	LECTERN	<p>MATERIAL : PRELAMINATED PARTICLE BOARD, SIZE : 550 MM(L) X 550 MM(D) X 1200 MM(H) COLOUR : BEVERIAN BEECH.</p> <p>* PROVIDING &amp; SUPPLYING VINTAGE PODIUM SIZE IS 550 MM(L) X 550 MM(D) X 1200 MM(H) TOP &amp; SIDE PANNELS MADE IN 18MM THICK PRELAMINATED PARTICAL BOARD OF GRADE II TYPE III OF IS 12823/LATEST WITH MACHINE PRESSED EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE FIXED DULY PASTED WITH THE ASSISTANCE OF EDGE BANDING MACHINE AT 200 DEGREE CELSIUS.</p> <p>* THE PODIUM HOUSES A FLAT TABLE TOP TO KEEP NOTES HANDY WHILE ALLOWING FOR WIRING AND A STAND FOR MIC. THE PODIUM DESIGN IS VINTAGE WITH FINE MOLDING ALONG THE EDGES OF THE FRAME. USING A COMBINATION OF PRELAMINATED PARTICLE BOARD OBELISK IS A FABULOUS EXAMPLE OF A PODIUM SETTING TO DELIVER SPEECHES AND LECTURES AT HALLS AND AUDITORIUMS.</p> <p>* THREE LAYER PRELAMINATED PARTICLES BOARD ( WOOD PRODUCT ) OF GRADE II TYPE III OF IS 12823/LATEST.</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
	<b>CAFETERIA</b>	
49	CAFETERIA TABLE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD SIZE : ( DIA ) 900 MM X 750MM(H) , COLOUR : BROWN-CLASSIC WALNUT / FINISH : LAMINATED.</p> <p>* PROVIDING AND SUPPLYING MODERN DESIGN CAFETERIA TABLE A COMBINATION OF METAL AND WOOD MAKE THE PRODUCTS UTILE AND A DELIGHT.TIMELESS DESIGN THAT ELEVATES YOUR OFFICE SPACE STRUCTURE OF SPACIOUS CAFETERIA TABLE, TABLETOP OFFERS YOU A GENEROUS WORKSPACE, WORK SURFACE USE PREMIUM QUALITY MATERIALS OVER ALL SIZE IS ( DIA ) 900 MM X 750MM(H) , TABLE TOP MADE OF 25 MM THICK WHICH GIVE WORK SURFACE FURNITURE IS FINISHED WITH EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE, FIXED WITH HOT MELT GLUE ON PRELAMINATED PARTICLE BOARD OF GRADE II TYPE III OF IS 12823/LATEST.</p>



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50	CAFETERIA CHAIR	<p>MATERIAL : SYNTHETIC FIBER SIZE : 381MM(L)X 419MM(D)X 839MM(H) COLOUR : RED/BLUE/YELLOW/BLACK / FINISH : SHINY FOR LEGS</p> <p>* SUPPLYING &amp; PROVIDING CAFETERIA CHAIR SIZE IS 381MM(L)X 419MM(D)X 839MM(H) A COMBINATION OF SYNTHETIC FIBER WITH STAINLESS STEEL MAKE THE PRODUCTS UTILE AND A DELIGHT, THE COMPLETE STRUCTURE SHALL BE MADE UP OF 20% GLASS FILLED BLOW MOLDED HIGH-DENSITY POLYETHYLENE ANDIS,THE FRAME STRUCTURE SHALL BE SUPPORTED BY ( 2 STRAIGHT + 2 SLANT ) FOUR LEGS.THE TUBULAR WELDED FRAME IS MADE FROM DIA2.22 +/- 0.03CMX 0.12+/- 0.0128 CM AND 3.5+/- 0.03 CM X 0.12+/- 0.0128 AM STAINLESS STEEL 202 GRADE TUBE &amp; THE TUBE ARE BUFF POLISHED TO GIVE SHINY FINISH.SEAT AND IN BACK GIVEN HANDLE TO HOLD ARE MADE OF INJECTION MOULDED HIGH IMPACT STRENGTH POLYPROPYLENE POLYMER COMPOUND WITH INDOOR GRADE UV RESISTANCE AND PRESSED FITTED WITH LEGS.THE CHAIR IS EASY TO STORE WHEN NOT IN USE, SINCE YOU CAN STACK UP TO 6 CHAIRS ON TOP OF EACH OTHER.</p>
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**II. HOSTEL FURNITURE**

<i>Sl.no</i>	<i>Furniture items</i>	<i>Specification</i>
51	WOODEN BED	<p>MATERIAL &amp; SUBTYPE SOLID WOOD - STEAM BEECH WOOD HEADBOARD MATERIAL SOLID WOOD FRAME MATERIAL SOLID WOOD LEG MATERIAL SOLID WOOD FINISH MATTE COLOUR &amp; COLOUR FAMILY BROWN - DARK OAK DIMENSION (W)990MM X (D)2090MM X (H)1050MM HEADBOARD HEIGHT 630MM STYLE CONTEMPORARY RECOMMENDED MATTRESS HEIGHT 6 INCH ASSEMBLY TYPE KNOCK DOWN STORAGE TYPE NO STORAGE</p>

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52	METAL BED	<p>SIZE : 1910 MM(L) X 940 MM(D) X 635 MM(H) MATERIAL : METAL / STYLE : MODERN COLOUR : AVAILABLE ON REQUEST / FINISH : EPOXY POLYESTER / PRODUCT WEIGHT : 38KG / CONSTRUCTION : KNOCKDOWN. * SUPPLYING AND PLACING EXCLUSIVE PREMIUM METAL MATERIAL MODER DESIGN GUEST ROOM TWO TIER BUNK BED SIZE IS 1910 MM(L) X 940 MM(D) X 635 MM(H),SQUARE + TUBE SHAPED FRAMING FRAMING MAKES IT WARP AND SCRATCH RESISTANT,COMFORTABLE DESIGNED KEEPING MODERN INDIAN LIFESTYLE IN MIND,MATERIAL USED BLACK METAL POWDER COATED ,THE HEADBOARD AND MATTRESS FRAME ENCOURAGE ROOM,DESIGNED WITH MODERN &amp; ELEGANCE, CHOOSE THE OPTION THAT SUITS YOUR HOME. * CONSTRUCTION STRUCTURE ARE MADE IN METAL IN BLACK POWDER COATING COLOR , HEADBOARD HAVE A UNIQUE SEMI CIRCLE SHAPE TOP TUBE OF HEADBOARD 19.05 X 0.7 MM THICK METAL FRAME STRUCTURE ARE MADE IN METAL 50.8 X 0.9 MM THICK BELOW THAT EXCLUSIVE DESIGN METAL PIPES 15.88 X 0.8 MM THICK.BED STEAD MAIN FRAME STRUCTURE ARE MADE IN METAL REC TUBE 50.8 X 25.4 X 0.9 THICK AND THE MAIN MATTRESS PANEL STRUCTURE ARE MADE IN METAL SQUARE TUBE 19.05 X 0.8 MM THICK,MATTRESS CENTRAL PANEL STRUCTURE ARE MADE IN METAL REC TUBE 40 X 20 X 0.8 MM THICK.BED BASED ON SEMI CIRCLE SHAPE TUBE STRUCTURE ARE MADE IN METAL 50.8 X 0.9 MM THICK.ALL METAL PARTS SHOULD BE FINISHING WITH EPOXY POLYESTER BLACK POWDER COATED TO THE THICKNESS OF 50-60 MICRONS(+/-5 MICRON) (11 TANK HOT ZINC PHOSPHATING PRE TREATMET PROCESS) * PACKING MATERIAL : PACKET COMES I N 2 BOX SIZE.OF.PACKET : BOX 1(CM) 174X104X10 / BOX 2(CM) 192X16X10 / CUBIC METER : 0.24.</p>
53	WARDROBE	<p>MATERIAL &amp; SUBTYPE ENGINEERED WOOD - PARTICLE BOARD, SOLID WOOD - STEAM BEECH WOOD, LAMINATE FRAME MATERIAL LAMINATE, ENGINEERED WOOD FINISH MATTE COLOUR &amp; COLOUR FAMILY BROWN - WALNUT DIMENSION (W)900MM X (D)550MM X (H)1950MM SIZE STANDARD WARRANTY 3 YEARS STYLE CONTEMPORARY ASSEMBLY TYPE KNOCK DOWN STORAGE TYPE DRAWERS, SHELVES</p>

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54	STUDY TABLE	<p>OFFICE DESK,STRUCTURE OF TABLE TOP RECTANGULAR SHAPE . PRIMARY WORK SURFACE OVER ALL SIZE IS 900MM(L)X 600MM(D)X 750MM(H) 18MM THICK TABLE TOP MADE OF PRELAMINATED PARTICLE BOARD WORK SURFACE WITH THE EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE WITH THE HOT MELT GLUE . * PROVISION OF TABLE TOP SUPPORTED WITH AN UNDERSTRUCTURE OF MS SQUARE FRAME IN 25MM*25MM*0.9MM. WITH 1 NUMBER DRAWER.DRAWER ASSEMBLY CONSISTS OF DRAWER FRONT MADE OF 0.6MM CRCA SHEET, DRAWER TRAY OF 0.8MM CRCA SHEET. All METALLIC PARTS SHOULD BE EPOXY POLYESTER POWDER COATING TO THICKNESS OF 50 MICRON (APPROX). * 1 DRAWER,SIZE IS : (L) 350MM X (D) 560MM X (H- FROM GROUND ) 700MM &amp; MODESTY SIZE IS : (L) 800 MM X (H) 200 MM, OVERALL CONSTRUCTION OF 1 DRAWER SIZE IS 350MM(L) X 550MM(D) X 250MM(H) IS 0.6 MM ALONG WITH FECA OF DRAWERS. * THREE LAYER PRELAMINATED PARTICLES BOARD(WOOD PRODUCT) OF GRADE II TYPE III OF IS 12823/LATEST , * THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE BIDDER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
55	CHAIRS	<p>MATERIAL : SYNTHETIC FIBER SIZE : 393MM(L)X 431MM(D)X 813MM(H) COLOUR : BLACK * SUPPLYING &amp; PROVIDING CAFETERIA CHAIR SIZE IS 393MM(L)X 431MM(D)X 813MM(H) A COMBINATION OF SYNTHETIC FIBER WITH STAINLESS STEEL MAKE THE PRODUCTS UTILE AND A DELIGHT, THE COMPLETE STRUCTURE SHALL BE MADE UP OF 20% GLASS FILLED BLOW MOLDED HIGH-DENSITY POLYETHYLENE ANDIS,THE FRAME STRUCTURE SHALL BE SUPPORTED BY ( 2 STRAIGHT + 2 SLANT ) FOUR LEGS.THE TUBULAR WELDED FRAME IS MADE FROM DIA2.22 +/- 0.03CMX 0.12+/- 0.0128 CM AND 3.5+/- 0.03 CM X 0.12+/- 0.0128 AM STAINLESS STEEL 202 GRADE TUBE &amp; THE TUBE ARE BUFF POLISHED TO GIVE SHINY FINISH &amp; BELOW THE LEGS PLASTIC CAPS MADE OF POLYPROPYLENE ARE PROVIDED ON THE FOOT REST SIDE TUBES AND BACK LEG TUBES ADDING MORE AESTHEIC VALUE TO THE PRODUCT.SEAT AND IN BACK ARE MADE OF INJECTION MOULDED HIGH IMPACT STRENGTH POLYPROPYLENE POLYMER COMPOUND WITH INDOOR GRADE UV RESISTANCE AND PRESSED FITTED WITH LEGS.THE CHAIR IS EASY TO STORE WHEN NOT IN USE, SINCE YOU CAN STACK UP TO 6 CHAIRS ON TOP OF EACH OTHER.</p>
56	VISITOR CHAIR	<p>OVERALL DIMENSION:- W600±10 X 600D X 890H +10 MM, SEAT OF MEDIUM BACK VISITOR CHAIR IS MADE OF 12MM THICK HOT PRESSED PLYWOOD PASTED WITH PU MOULDED FOAM WITH FABRIC UPHOLSTERY ON SEAT, USED PU MOULDED FOAM ON SEAT OF D-45 KG/M3, BACK OF MEDIUM BACK CHAIR IS MADE OF INJECTION MOULDED PP MATERIAL STRUCTURE WITH MESH FABRIC, SEAT SIZE:- 460W ±10 X 470H ±10 X 60THICK. +5 MM, BACK SIZE:- 440W ±10 X 470H ±10, ARMREST: - FIXED PP ARMREST, UNDER STRUCTURE: CANTILEVER FRAME MADE POWDER COATING OF ROUND PIPE 14 GAUGE THICKNESS WITH PLASTIC BUSHES.</p>





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57	CAFETERIA TABLE	<p>MATERIAL : PRELAMINATED PARTICLE BOARD SIZE : ( DIA ) 900 MM X 750MM(H) , COLOUR : BROWN-CLASSIC WALNUT / FINISH : LAMINATED. * PROVIDING AND SUPPLYING MODERN DESIGN CAFETERIA TABLE A COMBINATION OF METAL AND WOOD MAKE THE PRODUCTS UTILE AND A DELIGHT.TIMELESS DESIGN THAT ELEVATES YOUR OFFICE SPACE STRUCTURE OF SPACIOUS CAFETERIA TABLE,TABLETOP OFFERS YOU A GENEROUS WORKSPACE,WORK SURFACE USE PREMIUM QUALITY MATERIALS OVER ALL SIZE IS ( DIA ) 900 MM X 750MM(H) ,TABLE TOP MADE OF 25 MM THICK WHICH GIVE WORK SURFACE FURNITURE IS FINISHED WITH EXPOSED EDGES SHALL BE FINISHED WITH 2MM THICK EDGE BINDING TAPE OF MATCHING COLOUR AND SHADE,FIXED WITH HOT MELT GLUE ON PRELAMINATED PARTICLE BOARD OF GRADE II TYPE III OF IS 12823/LATEST.</p>
58	CAFETERIA CHAIR	<p>MATERIAL : SYNTHETIC FIBER SIZE : 381MM(L)X 419MM(D)X 839MM(H) COLOUR : RED/BLUE/YELLOW/BLACK / FINISH : SHINY FOR LEGS * SUPPLYING &amp; PROVIDING CAFETERIA CHAIR SIZE IS 381MM(L)X 419MM(D)X 839MM(H) A COMBINATION OF SYNTHETIC FIBER WITH STAINLESS STEEL MAKE THE PRODUCTS UTILE AND A DELIGHT, THE COMPLETE STRUCTURE SHALL BE MADE UP OF 20% GLASS FILLED BLOW MOLDED HIGH-DENSITY POLYETHYLENE ANDIS,THE FRAME STRUCTURE SHALL BE SUPPORTED BY ( 2 STRAIGHT + 2 SLANT ) FOUR LEGS.THE TUBULAR WELDED FRAME IS MADE FROM DIA2.22 +/- 0.03CMX 0.12+/- 0.0128 CM AND 3.5+/- 0.03 CM X 0.12+/- 0.0128 AM STAINLESS STEEL 202 GRADE TUBE &amp; THE TUBE ARE BUFF POLISHED TO GIVE SHINY FINISH.SEAT AND IN BACK GIVEN HANDLE TO HOLD ARE MADE OF INJECTION MOULDED HIGH IMPACT STRENGTH POLYPROPYLENE POLYMER COMPOUND WITH INDOOR GRADE UV RESISTANCE AND PRESSED FITTED WITH LEGS.THE CHAIR IS EASY TO STORE WHEN NOT IN USE, SINCE YOU CAN STACK UP TO 6 CHAIRS ON TOP OF EACH OTHER.</p>

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Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

59	Sofa (1 Seater)	<p>SIZE : 790MM(L) X760MM(D)X 790MM(H) MATERIAL : PREMIUM LEATHERETTE / STYLE : CONTEMPORARY COLOUR : BROWN-CAMEL BROWN / FINISH : MATTE. * SUPPLYING AND PLACING A SINGLE SEATER SOFA THAT SHALL BE CONSTRUCTED FROM NATURAL HARD WOOD AND COMMERCIAL PLYWOOD HAVING INNER FRAME. THE THICKNESS OF THE WOOD SHOULD ALLOW FOR THE HEAVY TENSION WEBBING. THE SOFA SIZE IS 790MM(L) X760MM(D)X 790MM(H) SHALL HAVE SPRING ATTACHED AND ALSO BE PADDED SEPARATELY. THE SEAT SHALL HAVE DOUBLE CONE SPRING INTEGRATED WITH EPITOME OF LUXURY. THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 45KG/M<sup>3</sup> IN SEAT AND 32KG/M<sup>3</sup> IN BACK. THERE SHALL BE CUSHION ARM PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32KG/M<sup>3</sup>. * THE COMPLETE STRUCTURE SHALL BE UPHOLSTERED WITH LEATHERITE TAPESTRY 0.8 +/- 50.1 MM THICK AND 535 GSM. THE SOFA SHALL BE SUPPORTED ON CRCA POWDER COATED PIPE FRAME HAVING CROSS-SECTION AREA 30MM X 15MM. THE COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE).UNDERSTRUCTURE SHALL HAVE MS POWDER COATED ROUND PIPE OF DIA. 25.4MM REDUCING LEG. THERE SHALL BE POLYPROPYLENE CO-POLYMER SHOE PROVIDED AT THE BOTTOM TO AVOID SCRATCHES ON THE FLOOR AS WELL AS UNEVEN SURFACING. THE SEAT SIZE SHALL BE 570 +/- 510MM(L) X 490 +/- 510MM(D) X 450 +/- 510MM(H). * THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM <a href="http://WWW.BIFMA.ORG">WWW.BIFMA.ORG</a>".</p>
60	Sofa (2 seater)	<p>SUPPLYING AND PLACING IN POSITION OF 2 SEATER MODERNIST CLASSIC DESIGN SOFA SIZE : 1380MM (L) X880MM (D)X 760MM (H). MATERIAL : NATURAL LEATHER / STYLE : CONTEMPORARY COLOUR : BROWN-MUSHROOM / FINISH : MATTE. SUPPLYING TWO SEATER EXCLUSIVE PREMIUM NATURAL LEATHER MODERNIST CLASSIC DESIGN LOUNGE SEATING SOFA SIZE IS 1380MM (L) X880MM (D)X 760MM (H) NATURAL LEATHER, THE PANELLED BACK AND CUSHIONED ARMRESTS ENCOURAGE LOUNGING, CONSTRUCTION INCLUDES MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE). UNDERSTRUCTURE FRAME IS 18 MM THICK KILN-DRIED GERMAN BEECH WOOD FRAMING IS HIGHLY DURABLE. STRUCTURE COVERED WITH P. U. FOAM FIXED WITH ADHESIVE GLUE ,FRAME PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING 32 +/- 5 DENSITY IN SEAT IT SHALL BE STACK FOAM OF 40MM THIK,66MM THICK BACK FOAM HAVING 32 +/- 5 DENSITY FOAM, CUSHION ARM 40MM THICK PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32 +/- 5. STACK FOAM STRUCTURE COVERED WITH NATURAL LEATHER IN BROWN-MUSHROOM COLOUR,COMPLEMENTED BY STYLISH LEGS ARE MADE BY UNIQUE SHAPE IN SLEEK STAINLESS STEEL MATERIAL. ( SEAT : 1120 MM (L) X 515 MM (D) X 450MM (H) , ARMS HEIGHT @ 590MM / BACK HEIGHT @ 350MM ). THE SELLER / COMPANY SHOULD BE NABCB CERTIFIED ISO-9001:2015, ISO-14001:2015, OHSAS-18001:2007, ISO-45001:2018, ISO-50001:2018, ISO 37001-2016 AND ISO-13485. OTHER</p>



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		CERTIFICATIONS UL-GREENGUARD GOLD (WITH MORE THAN 100 PRODUCTS APPROVED), GRIHA, GREENPRO, INDIAN DESIGN MARK, AIOTA, FSC & SEDEX CERTIFIED. THE BIDDER/MANUFACTURER SHOULD PREFERABLY ALSO BE A MEMBER OF BIFMA AND ONE OR MORE PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AS WELL AS BIFMA LEVEL-1(ONE) CERTIFIED AND AN OFFICIAL PRODUCT LINK/SCREENSHOT OF THE PRODUCT LISTING'S MUST BE PROVIDED FROM WWW.BIFMA.ORG" IN EACH CASE.
61	Sofa (3 Seater)	<p>SIZE : 1830MM(L) X760MM(D)X 790MM(H)  MATERIAL : PREMIUM LEATHERETTE / STYLE : CONTEMPORARY  COLOUR : BROWN-CAMEL BROWN / FINISH : MATTE.</p> <p>* SUPPLYING AND PLACING THREE SEATER SOFA THAT SHALL BE CONSTRUCTED FROM NATURAL HARD WOOD AND COMMERCIAL PLYWOOD HAVING INNER FRAME. THE THICKNESS OF THE WOOD SHOULD ALLOW FOR THE HEAVY TENSION WEBBING. THE SOFA SIZE IS 1830MM(L) X760MM(D)X 790MM(H) SHALL HAVE SPRING ATTACHED AND ALSO BE PADDED SEPARATELY. THE SEAT SHALL HAVE DOUBLE CONE SPRING INTEGRATED WITH EPITOME OF LUXURY. THE FRAME SHALL BE PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 45KG/M<sup>3</sup> IN SEAT AND 32KG/M<sup>3</sup> IN BACK. THERE SHALL BE CUSHION ARM PROVIDED PADDED WITH HIGH RESILIENCE POLYURETHANE FOAM HAVING DENSITY 32KG/M<sup>3</sup>.</p> <p>* THE COMPLETE STRUCTURE SHALL BE UPHOLSTEREDWITH LEATHERITE TAPESTRY 0.8 +/- 50.1 MM THICK AND 535 GSM. THE COMBINATION CONSTRUCTION STRUCTURE ARE MADE IN MOISTURE CONTENT SHALL BE LESS THAN (10-12)%. THICKNESS OF PLYWOOD USED (MM) SHALL BE 12 MM GRADE IS 303 INDIAN STANDARD FOR COMMERCIAL (COMMON) AND MOISTURE PROOF PLYWOOD (TENTATIVE).UNDERSTRUCTURE SHALL CONSIST OF MS POWDER COATED SQUARE PIPE HAVING CROSS-SECTION AREA 25MM X 25MM WITH 1.6MM THICK THE LEGS SHALL BE MADE UP OF POWDER COATED ROUND PIPE OF DIA. 25.4MM WITH 1.6MM THICK. THERE SHALL BE CO-POLYMER POLYPROPYLENE SHOE PROVIDED AT THE BOTTOM TO AVOID SCRATCHES ON THE FLOOR.THE SEAT SIZE SHALL BE 490 +/- 510MM(D) X 450 +/- 510MM(H).</p> <p>* THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THE MANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREEN PRO, AIOTA, INDIAN DESIGN MARK , FSC CERTIFICATE. THE MANUFACTURER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".</p>
62	CENTER TABLE	<p>MATERIAL &amp; SUBTYPE ENGINEERED WOOD - MDF  TABLE TOP MATERIAL ENGINEERED WOOD  LEG MATERIAL ENGINEERED WOOD  FINISH MATTE  COLOUR &amp; COLOUR FAMILY BROWN - WALNUT  DIMENSION (W) 1200MM X (D) 600MM X (H) 455MM  TABLE TOP THICKNESS 20MM  SIZE STANDARD  STYLE MODERN  ASSEMBLY TYPE KNOCK DOWN  STORAGE TYPE OPEN STORAGE</p>



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63	Dining Set 8 seater	Material & Subtype Metal - Stainless Steel, Premium Leatherette, Marble - Composite, Solid Wood - Rubber Wood Table Top Material Marble - Composite Chair Leg Material Solid Wood Chair Frame Material Solid Wood Upholstery Material Premium Leatherette Seat Material Premium Leatherette Finish Matte Colour & Colour Family Beige - Greige, Beige - Cream Dimension Of Table (W) 2000mm X (D) 1000mm X (H) 750mm Dimension Of Chair (W)520mm X (D)625mm X (H)1010mm Seating Capacity 8 Seater Seating Height 500mm Table Top Thickness 50mm
64	Side Table	Material & Subtype Engineered Wood - MDF Table Top Material Engineered Wood Leg Material Engineered Wood Finish Matte Colour & Colour Family Brown – Walnut Dimension (W) 600mm X (D) 600mm X (H) 455mm Table Top Thickness 20mm Assembly Type Knock Down Storage Type Open Storage
65	Almirah	MATERIAL : MILD STEEL , SIZE : 900MM(L)X 450MM(D)X 1830MM(H) COLOUR : MUNSHEL GREY & SAMOK GREY / FINISH : EPOXY POLYESTER, WEIGHT OF PRODUCT : 73 KG APPROX, CONSTRUCTION : CO2 WELDED . * PROVIDING & SUPPLING PLACING POSITION OF MODULAR GARNER FILING STORAGE BODY MADE OUT IN 22 GAGUE(0.8MM) & DOOR 20 GAGUE(1 MM) CRCA SHEET. 4 ADJUSTABLE SHELVE IN 22 GAGUE(0.8MM) CONCEALED HINGES HIGH YIELD STRENGTH . THESE COMPONENTS SHALL BE MADE OF CRCA ‘D’ GRADE HIGH YIELD STRENGTH AS PER IS:513 & IS:304 GRADE. THE STORWEL PLAIN SHOULD HAVE A MAZAK HANDLE AND THREE WAY LOCKING MECHANISM WITH SHOOTING BOLTS. * STORAGE HAVING FOUR SHELVES MAKING FIVE COMPARTMENT,UNIFORMLY DISTRIBUTED LOAD CAPACITY OF EACH SHELF SHALL BE 60 KG MAXIMUM FITTED WITH MS BODY LOCK & HANDLE. FINISHING WITH EPOXY POLYESTER POWDER COATED TO THE THICKNESS 50-60 MICRONS(+/-5 MICRON),IT SHOULD ALSO HAVE A M10 SCREW TYPE LEVELLER. * PACKING : 5 PLY CORRUGATED BOX OR PLY,EPE FOAM WITH ALL FOUR CORNER & SIDES PROTECTION PROPERLY PP STRAPED,PACKET COMES I N 3 BOX SIZE.OF.PACKET : PKT.NO 1) -1780MM (L) X 490MM (W) X 90MM (H) PKT NO. ) 1760MM (L) X 515MM (W) X 140MM (H) PKT NO. 3) 795MM (L) X 515MM (W) X 150MM (H), CUBIC METER : 0.72 , STORAGE DELIVERED IN : ASSEMBLED/CKD. * THE SELLER / COMPANY SHOULD BE ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018 CERTIFICATES OF THEMANUFACTURER CERTIFIED BY NATIONAL ACCREDITATION BOARD OF CERTIFYING BODIES, IGBC, SEDEX, GREENGUARD COMPLIANCE, GREEN PRO, AIOTA, INDIAN DESIGN MARK COMPLIANT, FSC CERTIFICATE. THE BIDDER SHOULD PREFERABLY BE A MEMBER OF BIFMA AND AT LEAST TWO PRODUCTS OF THE OEM SHOULD BE CERTIFIED AS BIFMA COMPLIANT AND AN OFFICIAL PRODUCT OFFICIAL LINK/SCREENSHOT OF THE PRODUCT LISTING MUST BE PROVIDED FROM WWW.BIFMA.ORG".





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## III. LAB EQUIPMENT

Sl.no	Lab Equipment	Specification	Dimension (L x B x H)
A	ZOOLOGY DEPT		
1	Microscope	<ul style="list-style-type: none"> <li>. It should have an Infinity Optical system.</li> <li>. Microscope frame for transmitted microscopy with color corrected LED illuminator Built in 0.5 W LED illumination system, to avoid bluish light.</li> <li>. Stage height adjustment mechanism</li> <li>. Movement distance per scale of fine adjustment knob: 2.5 <math>\mu</math>m, Movement distance per round of fine adjustment knob: 0.3mm, Total movement range: 15mm</li> <li>. Microscope should have a dedicated focus lock mechanism to prevent the sample from damage by heating the objective.</li> <li>. Pre-focusing knob provided, tension of the coarse adjustment knob adjustable, 360 degree rotatable Binocular tube with butterfly design eyepiece tube &amp; Field number 20 or higher, Tube tilting angle 30°</li> <li>. Interpupillary distance adjustment range 48 to 75 mm ,a pair of eyepiece 10X ( F.N.20) , eye point height adjustment , inwards facing quadruple revolving nosepiece.</li> <li>. Right-handle wire movement Mechanical fixed stage 120 x 132 mm, Movement range X direction: 76 mm x Y direction: 30mm, can hold haemocytometer.</li> <li>. Abbe condenser N.A. 1.25, Aperture is iris diaphragm Built in</li> <li>. PLAN Objectives 4X/N.A.01., Antifungal Quality</li> <li>. Plan 10X / N.A.0.25, Antifungal Quality</li> <li>. Plan 40X N.A. 0.65, Antifungal Quality</li> <li>. Plan 100X / N.A. 1.25, Antifungal Quality</li> <li>. AC adapter, fixing belt for transportation</li> <li>. Ergonomic grips add safety when retrieving the microscope from any high storage place or moving from one location to another.</li> <li>. A rack-less stage and stage cover give safety and longtime operation.</li> <li>. Adjustable eye point provides high comfort to an user group with variable heights during long hours usage of the system.</li> <li>. A locking pin facility in the observation tube is an most important and admired feature to avoid accidental displacement of tube from its alignment/ breakage of tube after falling down, especially when the same is being used by students/ technicians in the lab.</li> <li>. LED light source with high color reproducibility for better imaging and contrast. It reduce blue Colour and preserve vivid colors on HE staining</li> <li>. Built in security slot to attach the anti theft cable which is more require for student microscope</li> <li>. Both hand focusing knob to focus preciously and ergonomic</li> <li>. Microscope should be upgradable to dark field attachment.</li> <li>. Flat field of view for better imaging view.</li> <li>. Higher field of view.</li> <li>. A storage compartment on the back of the microscope makes it easy to store the cable and safety.</li> <li>. Microscope should have Provision to attach antitheft</li> </ul>	



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		<p>cable at the back.</p> <ul style="list-style-type: none"><li>. Minimum 500 installations should be there in eastern region of India.</li><li>. Technical evaluation will be done based on the physical demonstration of the quoted model.</li><li>. International Certificate must be provided ISO &amp; IEC must be provided.</li></ul>	
2	Upright LED Binocular Microscope	<ul style="list-style-type: none"><li>. Microscope frame for transmitted light microscopy, With Built in Koehler illumination with field iris diaphragm ring built in with transmitted light Halogen / LED, High Sensitivity Focusing Knob Fine adjustment: 0.1 mm per turn. Coarse adjustment: 15 mm per turn. Stroke: 25 mm (1micro m gradiation), UIS Optical System or Better</li><li>. Precentered Lamp housing incorporating a white LED Lamp house, excellent color reproduction, LED life Min. 20,000 hours, with connecting cable</li><li>. Ergonomic telescopic tilting binocular tube, 0° to 25 tilting, including eyepiece caps</li><li>. Set of Wide field 10X, FN22 and 10X, FN22, focusable eyepieces of better</li><li>. Ceramic surface mechanical stage with right-hand low drive control (long type), provision for adjusting the X- and Y-Axis movement knob tension. Stage can be rotated upto 230° or better with Thick type Specimen Holder for two specimen</li><li>. Universal condenser for Bright Field &amp; Darkfield applications with N.A. 1.1 or Better</li><li>. Quintuple higher Revolving Nosepiece with Objectives:<ul style="list-style-type: none"><li>Plan achromat objective 10X/0.25, WD 10.6 Better</li><li>Plan achromat objective 20X/ 0.4, WD 1.2 or Better</li><li>Plan achromat objective 40X/0.65, WD 0.6 (spring) or Better</li><li>Plan achromat objective 100X/1.25, WD 0.13 (spring, oil) or Better</li></ul></li><li>. The Microscope should be upgradable to DIC attachment, minimum 8 position Fluorescence Turret and Karyotyping and FISH applications, Manual Karyotype software with</li></ul>	



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		<p>database should be quoted in optional</p> <ul style="list-style-type: none"><li>. Microscope, and Objectives should be from same manufacturer, the models and specification should be available in OEM website.</li><li>. Dust Cover and Immersion Oil should be provided at no extra cost</li></ul>	
3	Slides	Standard.	
4	Cover Slides	Standard.	
5	Hot Air Oven (Digital)	<ul style="list-style-type: none"><li>. It should have triple walled construction.</li><li>. It should have 3" High grade heavy glass wool insulation ensures stable temperature &amp; reduced energy consumption.</li><li>. It should have motorized blower on top side of the chamber develops unique air flow system which ensures maximum uniform temperature distribution inside the chamber. Unique air flow assures quick recovery after door openings</li><li>. It should have 1/12 HP, TEFC, F-class insulation, Single Phase, 1440 RPM, 230 Volts</li><li>. It should have S. S. tubular heating elements used on side walls to maintain uniform condition inside the chamber.</li><li>. It should have safety cum stand by thermostat to cut off the heater supply in case of overshoot of temperature.</li><li>. It should have single door fitted on heavy cast and chromium plated hinges with spring.</li><li>. It Should have an adjustable tray at a height of 25mm</li><li>. It should have Specially designed Stainless-Steel Rod Trays which ensure uniform temperature distribution</li><li>. It should have 230 V AC, Single Phase, 50 Hz.</li><li>. It should have inside S.S. 304 mirror finish and outer Mild steel (CRCA) sheet with powder coated.</li><li>. It should have Temp. Range 5 °C above ambient to 300 °C</li><li>. It should have Temperature Accuracy: <math>\pm 0.2^{\circ}\text{C}</math></li><li>. It should have Temperature Uniformity: <math>\pm 1^{\circ}\text{C}</math></li><li>. It should have Safety digital temperature controller with accessories</li><li>. It should have Digital Timer 0-999 (Hr. / Min / Sec) with Alarm</li><li>. It should have Imported Microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp; process value for precise control of temperature.</li><li>. Litre capacity- 43/91/122/216/324</li><li>. It should have CE Certification &amp; ISO Certification</li></ul>	
6	Tray (Enamel)	Medium Size	
7	Measuring cylinder	100ml	
8	Pipet	(5ml/10ml/25ml)	



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9	Conical Flask	250ml	
10	Beaker	250 ml	
11	Beaker	500 ml	
12	Beaker	1000 ml	
13	Pretidish	Standard.	
14	Watch glass	Pkt of 10	
15	Glass jar	25 cm	
16	Forceps	4 inch, pointed	
17	Scissors	Pointed	
18	Test Tube Brush	Standard.	
19	Needle (Descanting)	Standard.	
20	Cotton	Standard.	
21	Heating plate (Hot plate)	Standard.	
22	Museum bottle	500 ml	
23	Thermometer (0-2200)	Standard.	
24	Water bath	<ul style="list-style-type: none"> <li>. GMP Model Inside S.S. 316 mirror finish seamless pot (argon welded) which avoid water leakage problems. Outer S.S. 304 with dull smooth buff finish.</li> <li>. Temperature Range 5 °C above ambient to 95 °C</li> <li>. Temperature Accuracy <math>\pm 0.5^{\circ}\text{C}</math></li> <li>. Control System Imported microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp; process value for precise control of temperature.</li> <li>. Shaking Speed 40 to 120 RPM</li> <li>. Speed indicator Digital RPM Controller &amp; Indicator.</li> <li>. Digital Timer 0-999 ( Hr / Min / Sec ) with Alarm</li> <li>. It Should have ISO and CE/USFDA Certifications</li> <li>. Litre capacity- 4.2/8/12</li> </ul>	
25	Digital Thermometer	-50 C to +150 C Measurement range at interval of 0.1 C	
26	Cyclometer	Standard.	
27	Digital Colorimeter	<p>It Should have a High standard glass filters - 8 No</p> <p>It should have a Mini Volume - 1ml</p> <p>It should have a min Display – 2.5 Digit LED</p> <p>It should have a Range - 400 to 700nm</p> <p>It should have a Output - OD (0 to 2.00)</p> <p>It should have an Accuracy - <math>\pm 0.02(\text{OD}) \pm 1\text{digit T(FS)}</math> : <math>\pm 1\%</math></p> <p>Preferred Detector Photocell - High Sensitive Photo diode</p> <p>Light Source - 6V, 10W Tungsten filament lamp</p> <p>It should work on Power Supply - 230 V <math>\pm 5\%</math>, 50 Hz AC, Battery Backup Facility - 12 V (Optional)</p> <p>It should have - 8 Filter, 400, 490, 520, 540, 590, 620, 650, 700nm</p> <p>Preferred Dimension - 290x315x210mm and Weight - 5 kg net</p> <p>It Should be certified by ISO, IEC, CE/USFDA.</p>	





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Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

28	Nano Drop One Spectrophotometer with all accessories	<p>Full spectrum microvolume UV-Vis spectrophotometer with 190nm - 850nm wavelength measurement range Sample volume 1.0 - 2.0 p,L- direct solution measurement without need for consumables such as cuvettes or slides</p>	<ul style="list-style-type: none"><li>. Auto-range path length from 0.03mm to 1.0mm ensures optimal data quality for every measurement without need for dilution. 2 to 27500 nglul-dsDNA)</li><li>. AcclarorM Sample Intelligence technology:</li><li>. Contaminant identification with corrected concentration</li><li>. Embedded technical support</li><li>. Columl integrity sensor</li><li>. Ergonomic design with tilting and sliding screen accommodates both left and right</li><li>. Pre-programmed methods for:<ul style="list-style-type: none"><li>. ssDNA, dsDNA, RNA, oligoDNA, oligoRNA, microarray (fluorescently labeled nucleic acid), Protein (,4'280), Protein A205, Protein colorimetric (Bradford, BCA, Lowry and PiercerM660), Proteins &amp; Labels (labeled proteins), Kinetics, Custom Methods, UV-Vis</li></ul></li></ul>
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Vide Notification No. LL(B).78/2017/16, dated 27.04.2018

29	Digital pH meter	<ul style="list-style-type: none"> <li>. Instrument should be standalone with 7" full color touch screen to enable easy of users.</li> <li>. Instrument should be latest one with upgraded technology launched within 1 year.</li> <li>. Instrument should have facility for method creations up to 20 numbers.</li> <li>. Instrument should have brilliant, high-resolution terminal with Status Light concept and for ergonomic and stress-free working environment.</li> <li>. Instrument should have user management with at least 2 level user groups such as Operator and Administrator with password protection to create minimum 30 users.</li> <li>. Instrument should have user Guidance for calibration, limit control, verification support.</li> <li>. Instrument should have workplace options for complete solution with precise electrode arm with dedicated positions for calibration, measurement, washing and storage.</li> <li>. pH measuring range: <math>-2.000 \dots 20.000 \pm 0.001</math> pH , <math>\pm 2000</math> mV</li> <li>. It should be possible to enter Sample ID (easy entry), user ID, sensor ID, date and time easily in to meter.</li> <li>. Instrument should have connectivity to transfer data with PC, USB, line printer</li> <li>. Instrument should have internal storage up to 2000 data or better.</li> <li>. The sensors used in instrument should have Intelligent Sensor Management-ISM facility for auto recognition of sensor with name, serial number and last five calibration data.</li> <li>. Instrument should have a large Touch Screen display (7 inch or more) for complete control of the instrument.</li> <li>. It should be possible to connect with Easy mix magnetic stirrer with manual control to use stirrer during analysis and for other sample preparation purpose also.</li> <li>. Instrument should have connectivity with a PC through Easy Direct pH software for data storage purpose and the software should have control chart facility and calibration chart facility to see analysis and calibration data trend.</li> <li>. It should be possible to limit control results with color code to indicate user about results pass/fail.</li> <li>. Instrument should have IP54 rating for dust and splash proof.</li> </ul>	
30	Weighing Machine-Digital	<p>The outer body should be made of Glass in Round Shape</p> <p>The scale should tell you the accurate weight with the help of advanced high precision strain gauge sensors system.</p> <p>The Capacity of Digital bathroom Scale should be 150 Kg and the accuracy should be 0.1Kg.</p> <p>It should have Auto zero - auto off</p> <p>These digital scales should have an LCD display with 25 mm digits.</p>	



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31	Turbidometer	<p>It Should have ISO and CE/USFDA Certifications  It Display should have 16×2 Alphanumeric LCD Display  Grade A1  Interface Language English is mandatory  Light Source LED should be available  Material used should be Plastic  Measurement Range should be 5 Auto Range  Meter Style should be LCD  It should have 5 Points Calibration  It should have Calibration Power (W) 230 VAC  It should have Power Source 12 VDC  Adapter Range 0-1000 NTU/JTU should be complied  Resolution 0.1 should be complied  Temperature (Deg. Celsius) 0-100  Turbidity Range 0-1000 NTU  Waterproof  Weight (kg) 2 kg.</p>	
32	Price Label Printer	58mm Label Printer (2 in 1) - Thermal Label & Receipt Printer (50x30 Label Combo) Free 250 Labels	
33	2HP Vegetable Cutting Machine	Blade: 7 Capacity: 600 - 700 Kg, Manual	
34	Dry Fruit Cutting Machine With	Power: 0.25 HP, Voltage: 220V, Phase:Single, No. of Blades: 4	
35	Cabinet Dryer - 50 ltrs, Electric	50 ltrs, Electric with digital control	
36	Vacuum Sealer	371 x 14w x 6H cms, corded, 110 W, Automatic	
37	Dry Grinder	1200 W, 300 gms/cycle, 25000 rpm rotations, compact	
38	Autoclave	<p>Sterilization Programs - 7 Types, Class N autoclave (according to European Standard EN 13060), A Built-in independent steam generator, making the sterilization cycle faster, High precision sterilization temperature: 121°C / 1.1barOR 134 °C/ 2.1 bar, Chamber Size –Ø 247 x 450 mm, Dimensions (mm) - 480 X 465 X 690, Noise - &lt;60 dB, AtmosphericPressure 76 kPa- 106 kPa</p>	LCD display, Chamber Volume - 23 Litres,
39	Laminar Air Flow	3ft, Inner SS 304 & Outer Mild Steel	
40	Manual Humidifier	Single phase, 2800 rpm, capacity 5 ltrs	
41	Inverted Air Conditioner	(1.5 ton) - dimension 828 x 327 x 536 mm	
42	BOD Incubator-	<p>Chamber Volume:6 cu.ft.  Construction Type: Double Walled  Inner Chamber:Stainless 304  Outer Body: Mild Steel with Epoxy Powder Coated Paint  Temperature Range: 10°C to 60°C  Temperature Accuracy: ± 0.5°C  Temperature Sensitivity: ± 0.5 °C  Temperature Sensor: PT-100  Refrigeration System: EMERSON Compressor &amp; CFC Free R134a Refrigerant  Temperature Controller: Digital PID Controller Display: LED Digital Display  Insulation: PUF Insulation to avoid Heat Loss Shelves  Standard: 3nos. SS 304 Wire Mesh Stainless Steel shelves  Door (Double): Inner Acrylic Door &amp; Outer Metal Door with Gasket  Air Circulation: Motorized Blower Fan  Movability:Mounting on heavy duty castor wheels Power Consumption: 950W, 230V, 50 Hz</p>	170 LTR, Inner SS 304, Outer MS, LCD / LED Digital
43	Boiler Water Electric	<p>Energy Efficient Design for less consumption of fuel  Wood fired (Optional - Electric, Gas, Diesel) Heavy duty &amp; Safe for working 8mm &amp; 10mm Steel for Steamer &amp; 6mm &amp; 8mm for Cooker Low maintenance cost &amp; Reasonable</p>	



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		Spare Cost Warranty- 1Year Prompt Service & Reasonable ServiceCharges	
44	Double Door Refrigerator Frost Free.	188 litres Freezer Capacity 58 Litres Installation TypeFreestanding Part Number 2J2R4355 Form Factor Convertible Special FeaturesInverter Compressor, Door Alarm,Adjustable Shelves ColourShiny Steel Voltage 230 Volts	
45	5 Part Hematology Analyzer	<p>It should be a 5 part hematology analyzer based on flow cytometry principle for 5 part analysis</p> <p>It should have 60 samples per hour, with 2 histograms and 2 scattergrams</p> <p>It should allow up to 7 part differentiation of WBC including Immature Granulocytes and Atypical Lymphocytes</p> <p>It should have titanium incubation chamber for temperature control accurately</p> <p>Should offer 3D topographic maps technology.</p> <p>System should have Laser Scatter Technology.</p> <p>System should be Flow cytometry technology</p> <p>System should have Cyanide free Reagent</p> <p>System should have Constant Linear sheath Flow.</p> <p>System should have 28 Parameter.</p> <p>System should have multiple QC rules, including L-J, X-B.</p> <p>System should have CE or FDA Certificate.</p> <p>System should have Integral Titanium incubation system</p> <p>System should have Research parameter ALY, ALY%, IG, IG%</p> <p>System should have 28 parameter</p> <p>System should have separate reagent for CBC and 5 Diff,CBC</p> <p>Should use a dedicated PC with possibility for remote support</p> <p>Should be able to operate in 3 part/5 part mode both.</p> <p>Consumables List:</p> <ol style="list-style-type: none"> <li>Diluent</li> <li>Lyse H</li> <li>Lyse D</li> <li>Cleanser</li> <li>System Cleaning Solution</li> <li>PM Kit</li> <li>Calibrator for 5-Part</li> <li>Control Level 1,2,3 for 5-Part</li> </ol>	
46	Fully Automated Biochemistry Analyzer	<p>Constant throughput fully automated biochemistry analyzer</p> <p>Speed should be 200 tests/hour for double reagent biochemistry assays</p> <p>Clot detection should be offered as a standard feature on the analyzer to ensure use of primary tube without any risk of clots</p> <p>Should be an open system without any must use of barcoded reagents</p> <p>System packs should be provided for guaranteed number of tests per pack in prefilled vials for at least 20 common biochemistry reagents including CRP</p> <p>On board laundry with at least 7 stage washing process must be there</p> <p>On board high quality refrigeration should be there for reagent and calibration stability on the analyzer</p> <p>Large number of sample/reagents for trouble free operation – At least 38 each for sample and reagents</p> <p>Wavelength of 320 – 850nm with at least 7 filters on board</p>	





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		<p>There should be a dedicated mixer on board for stirring of samples and reagents</p> <p>The machine should use reusable cuvettes – At least 60 onboard cuvettes must be there with dirty cuvette detection feature.</p> <p>The Machine should perform the test with primary tube/ special sample cup.</p> <p>System should have CE or FDA certify .</p>	
47	Elisa Reader & Washer	<p>Measuring Range - 0.0 - 4.0000 Abs, Linear &amp; Accurate results of samples upto 3.500 absorbance</p> <p>Pre-programmed tests - 28 Pre-programmed ELISA tests and provision to add new ELISA test programme .</p> <p>Printer - In-built printer ( Additional printing option of attaching external printer)</p> <p>Wavelengths - 4 standard filters : 405nm, 450nm, 492nm, 630nm</p> <p>Accuracy - 0-2.0A: <math>\pm 1.0\%</math> or <math>\pm 0.007A</math></p> <p>- 2.5A: <math>\pm 0.064A</math></p> <p>- 3.0A: <math>\pm 0.113A</math></p> <p>Precision - <math>&lt;0.5\%</math> for 0.5A and 1.0A, <math>&lt;0.8\%</math> for 2.5A, <math>&lt;1.2\%</math> for 3.0A</p> <p>Reading Speed - <math>&lt;8</math> seconds in continuous mode</p> <p>Interface - USB port, SD card slot , RS-232 &amp; RJ45 interface</p> <p>HIS &amp; LIS compatibility - HIS &amp; LIS compatible with application support</p> <p>Data Protection - Auto back up in case of power outage</p> <p>Incubator - In-built incubator for two 96 well microplate</p> <p>Incubator Temperature - 3 different fixed Temperature <math>25^{\circ}C</math>, <math>30^{\circ}C</math> &amp; <math>37.0^{\circ}C</math></p> <p>Washing protocols - 100</p> <p>Residual Volume - <math>&lt; 1\mu l</math></p> <p>Temperature Uniformity - <math>+1^{\circ}C</math></p>	
48	High Sped Programmable Centrifuge	<ul style="list-style-type: none"> <li>• Programmable centrifuge with speed of 300 - 16000 rpm</li> <li>• LED with digital display for easy programming, microprocessor control speed and time</li> <li>• Full metal body with three layer of steel jacket protection</li> <li>• Low working noise (<math>&lt;58</math> dB)</li> <li>• Anodized aluminium or stainless steel rotor, for consistent performance, durability and reliability</li> <li>• Autoclavable rotor</li> <li>• Maintenance free Brushless DC frequency motor</li> <li>• Protection from imbalance and over temperature</li> <li>• Auto release lid function</li> <li>• Machine parameters can be modified while machine is under operation condition</li> <li>• Available with wide range of replaceable rotors</li> <li>• Auto diagnosis of functional errors in the machine</li> <li>• Offers 10 levels of acceleration and deceleration for improved working</li> <li>• Timer can be set between 1-59 minutes with increment of 1 min.</li> </ul>	



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		<ul style="list-style-type: none"> <li>• Auto stop function as the timer countdown comes to zero</li> <li>• Approximate weight 42kg</li> </ul>	
49	Atomic Absorption Spectrophotometer with 16 lamps- Hg, Fe, Na, K, Ar, Ur, Se, Te, Bi, Sn, Cr, Cl, Pb, Mb, Zn, Si	<p>Silent Air Compressor with Filter &amp; Moisture Trap Nitrous Oxide Regulator 100mm Slot Ti Burner Software Controlled VPI00 Continuous Flow Vapour Generation System (For the analysis of Hg, As, Se, Sb, Te, Bi and Sn in trace level) Carrier gas: Argon or nitrogen Solution transport:</p> <ul style="list-style-type: none"> <li>• Variable speed, 4 channel peristaltic pump using continuous flow principle</li> </ul> <p>LH Universal Accessory Mount Data Coded Hollow Cathode Lamp - Iron, Copper, Zinc, Manganese, Arsenic, Chromium, Lead, Molybdenum, Mercury &amp; Cadmium (5000 mA/hr. with Lifetime Guarantee) Emerson makes Liebert® brand 3KVA true online UPS System having 1phase input &amp; 1phase output with 12V, SMF battery with Battery rack &amp; Intercell connector to provide 60 mints backup Stainless Steel Hood with Exhaust Fan with Exhaust Fan including necessary fitting and Ducting Facility NIST Traceable Single Element NIST Traceable Standard Solution: for Iron, Copper, Zinc, Manganese, Arsenic, Chromium, Lead, Molybdenum, Mercury &amp; Cadmium for each single element &amp; in Nitric Acid Matrix of strength 1 000 mg/Lit &amp; of minimum 125 ml volume UHP Grade Dissolved Acetylene Filled Gas Cylinder, purity 98.5% in 41 Lit. WIC Carbon Steel Cylinder with Valve, Valve guard, necessary Tubing, Connectors &amp; Certificates. Gas Volume: 5-6 m3 per Cylinder UHP Grade Nitrous Oxide Filled Gas Cylinder, purity 99.9% in 47 Lit. W/C Carbon Steel Cylinder with Valve, Valve guard, necessary Tubing, Connectors &amp; Certificates. Gas Volume: 17.0 m3 per Cylinder UHP Grade Argon Filled Gas Cylinder, 47 Lit. W/C (99.99% Purity) filled with gases with necessary Tubing &amp; Connectors &amp; Certificates, Capacity: 7m3 Double Stage, Double Gauge, High Pressure Regulator for Acetylene and Argon Pre-heater for Nitrous Oxide Regulator</p>	<ul style="list-style-type: none"> <li>o True Dual Atomizer for Flame and Furnace operation without any manual adjustment &amp; movement.</li> <li>o Essential Furnace Vision Tool option (with Optional GF)</li> <li>§ Advanced design flame atomizer</li> <li>§ Wide range PMT (180-900nm)</li> <li>§ Accepts GFS35 or GFS35Z Graphite Furnace and Auto- sampler Modules</li> <li>§ Graphite Furnace Television (GFTV) included for simplified method development (Optional)</li> <li>§ Change over from flame to furnace analysis with no manual intervention</li> <li>• Lamp carousel to accommodate 6 Lamps each with a dedicated power supply. Accepts single/multi-element and coded/un-coded</li> </ul>



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		<p>lamps</p> <ul style="list-style-type: none"><li>• Advanced double beam optics arrangement.</li><li>• • Auto burner height optimization fully inert spray chamber</li><li>• Quad line (continuum source) is standard on all spectrometers.</li><li>• Background signals below 2A are corrected for with less than 2% error. Total signal up to 3A</li><li>• Optics &amp; Background-6 Lamp auto-aligning turret with dedicated power supplies for each lamp</li><li>• Double beam Stockdale Optics</li><li>• _High energy, silica coated, sealed optical system with self-calibrating Echelle monochromator Monochromator: Echelle monochromator and prism (Lines: &gt; 4700/mm) Wavelength range 180-900 nm with a wide range PMT - Continuous Source Quad Line D2 Back Ground Correction</li><li>• Performance: &gt; 0.95Abs with precession of &lt; 0.3% RSD from ten per second integration for 5mg/L Cu solution</li><li>• _Focal Length 270 nm, reciprocal linear dispersion</li></ul>
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			<p>0.5nm/mm at 200 nm Slit Width: Nominal 0.1 (available below 400nm), 0.2, 0.5, and 1.0nm spectral bandwidths</p> <p>Flame System</p> <ul style="list-style-type: none"><li>• System supported by enhanced Universal Finned 50mm Titanium Burner to accommodate all flame types.</li><li>• Gas lines fitted with flame arrestors and pressure sensors.</li><li>• An inert fluoroplastic spray chamber</li><li>• Automatic flame ignition software, automatic flame shutdown</li><li>• SOLAAR Software supplied as standard</li></ul>
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50	HPLC system	<p><b>HPLC</b></p> <ul style="list-style-type: none"> <li>• Flow rate of 0.01 -10ml/min or better</li> <li>• system back pressure of minimum 10,000 psi or better for the entire flow rate range.</li> <li>• Flow rate accuracy of <math>\pm 1.0\%</math> or better</li> <li>• Flow precision of <math>&lt;0.05\%</math> RSD or <math>\pm 0.020</math> min SD, whichever is greater</li> <li>• Solvent rack and solvent bottles (at least four) also to be quoted</li> <li>• System should have the gradient delay volume variable option low to high with multiple mixer.</li> <li>• for minimum band spreading, higher theoretical plates, higher resolution.</li> <li>• System should be free from any form of Pulse dampner based technology.</li> </ul> <p><b>Auto Sampler :</b></p> <ul style="list-style-type: none"> <li>• The Auto sampler should operate at pressures in the range 10,000 psi or better</li> <li>• The linearity of the auto sampler must be <math>r &gt; 0.99999</math> (caffeine in water).or better</li> <li>• The auto sampler must offer automated barcode recognition of the type of sample rack or</li> <li>• Well plate and detection of empty sample segments.</li> <li>• The complete eluent flow path must compatible with eluent conditions (pH 2-12, max. 1 mol/L chloride concentration, no buffer</li> <li>• The injection principle of the auto sampler must be in-line split-loop (also called flow through needle) for high reproducibility injections with no sample loss..</li> <li>• The auto sampler must support a sample capacity minimum 200 vials. Position.</li> <li>• The injection range of the auto sampler is 0.01–100<math>\mu</math>L or better</li> <li>• The injection volume precision of the auto sampler <math>&lt; 0.25\%</math> RSD or better</li> <li>• (caffeine in water), typically <math>&lt; 0.5\%</math> area RSD for 0.5 <math>\mu</math>L (caffeine in water).</li> <li>• The carryover of the auto sampler must be <math>&lt; 0.0004\%</math> or better</li> <li>• The auto sampler must support injection cycle times down to 8 s or lower</li> </ul> <p><b>PDA Detector:</b></p> <ul style="list-style-type: none"> <li>• Source : D2 lamp/Tungsten or any better source</li> <li>• Wavelength range of: 190-800 nm or higher.</li> <li>• Flow Cell :10mm low dispersion flow cell ;</li> <li>• Lamp temperature control facility should be available for better sensitivity &amp; accuracy with Lamp Optimization and Life time monitoring facility.</li> <li>• Optical Bandwidth: 0.7nm or better</li> <li>• Number of Diodes : 512 or higher for better spectral resolution.</li> <li>• Data Acquisition : 80 Hz or better</li> <li>• The detector should be capable to simultaneously acquire up to 8 channels of single-wavelength data along with 3D data.</li> <li>• The detector must be designed with a temperature-controlled optical bench.</li> <li>• The detector must operate with a settable optical slit.</li> <li>• Lamps and flow cells must be easily exchangeable from the front of the detector without the need for tools.</li> <li>• Identification chips monitor changes to flow cell and lamps automatically. Key life-span</li> </ul>	
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		<ul style="list-style-type: none"><li>parameters are automatically logged.</li><li>Software tools must allow immediate on-line review of 3D data and software-supported diagnostic functions.</li></ul> <p><b>Column oven:</b> Column compartment temperature range: 5–80 °C in 0.1 °C Increments or better Column number: minimum 2 number or higher for automated method scouting Column oven heating method: Forced air and still air both for uniform heating. Temperature Accuracy <math>\pm 0.5</math> DEG C or better Temperature stability <math>\pm 0.05</math> °C or better Column Capacity two individual column programming slot. Should support complete biocompatibility. Should offer with suitable pre column heater.</p> <p><b>Columns :</b> Suitable C18 5UM 250X4.6MM HPLC COLUMN Qty : 1 Suitable Guard Column 5um,4.6×10mm with Holder Qty : 1 Suitable amino acid columns Qty-1</p> <p><b>Software :</b> <ul style="list-style-type: none"><li>The software should be an original licensed copy software with clear part number mentioned in the offer along with latest version computer/laser printer with original operating software should be quoted. All automated LC calculations facility should be available. Apex integration, Gaussian skimming, Free up gradation of software during the period of 5 years. The system should be capable enough to programme at least 1-9 different Gradient curves like (Linear, Convex, Concave etc.). Software should have option for relational data base integration.</li></ul></p> <p><b>Computer &amp; Printer:</b> <ul style="list-style-type: none"><li>Suitable Desktop Branded PC.</li><li>Suitable UPS</li></ul></p> <p><b>Other Accessories</b> <ul style="list-style-type: none"><li>Amino acid derivatization reagents and standards</li><li>Hydrolysis tubes</li></ul></p> <p><b>Other Specifications</b> <ul style="list-style-type: none"><li>The published specification should be validated by online literatures by the bidders</li><li>The specification is the minimum and higher model will be given preferences</li><li>The system should not require any tools, spanner for column fittings</li><li>The system should be upgradable to UHPLC without any hardware modifications.</li><li>Warranty of one additional year to be offered extra</li><li>System Price should be quoted up to FOR Destination</li></ul></p>	
51	Ultrapure Tap to Type I/II Water Purification System with Touch Smart Dispenser with all accessories	Daily Output 100 L Endotoxin Concentration 0.001 EU/mL Feed water Source Potable Tap Flow Rate $\geq 1.5$ L/min flow rate Product Water Type Type 1 and 2 Resistivity 18.2 M $\Omega$ •cm Type Water Purification System Includes	Touch Type 1 Dispenser, 30 L Tank, Barnstead Pre- Treatment System, and start up Dimensions (L x W x H) 24.5 X 24 X 16 in. (62.2 X 61 x 40.6 cm) Weight (English) 68 lb. dry, 101 lb. wet Weight (Metric) 31 kg dry, 46 kg



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			wet Pre-Filtration System
52	Colony Counter (Digital) with Marker pen for Digital counting	(Digital) with Marker pen for Digital counting	
53	Trinocular microscope	<p>Features an infinite optical system Seidentopf binocular viewing head inclined at 45° for comfortable viewing Rotates 360 degrees for easy sharing. Interpupillary distance adjustable from 48mm to 75mm. Wide field eyepiece (WF10)?F.N.20mm) for a broad field of view</p> <p>Quadruple nosepiece for quickly switching between four objective lenses</p> <p>High contrast chromatic-free full plan objectives (4X, 10X, 40X, 100X oil) for various magnification levels.</p> <p>Coaxial coarse and fine adjustment for precise focusing with Fine division of 0.001mm, Coarse stroke of 37.7mm/rotation and fine stroke of 0.1mm/rotation and Moving range of 24mm</p> <p>Abbe condenser with NA 1.25 for optimal light gathering and Iris diaphragm.</p> <p>Double layer mechanical stage 142X 132mm</p> <p>Moving range of 75mm x 50mm.</p> <p>External illumination with a 3W LED</p> <p>Observed through either the LCD screen or the eyepiece</p> <p>Powered by USB 5V with a voltage range of 4.5V to 6V</p>	
54	Incubated/Refrigerated Shaker	<p>Orbit 19 mm, Load Bearing Capacity (Metric) 15.9 kg</p> <p>Speed Range 15 to 500 rpm, ±1 rpm, Electrical Requirements, 240 V, 50 Hz, Voltage 240 V Temperature Range (Metric) Ambient +10 ° to 80°C, Wattage 1100 W, Amperage, 4.5 A, Product Type Shaker Load Bearing Capacity (English) 35 lb., Certifications / Compliance CE, cUL, UL Temperature Range (English) 50°F to 140°F Temperature Resolution ±0.1C</p> <p>Frequency 50/60 Hz, Material Stainless Steel Platform, Height (English) 40.5 in., Height (Metric) 102.9 cm, Length (English) 33 in. Length (English), Platform 18 in., Length (Metric), 83.8 cm Length (Metric) Platform 45.7 cm, Width (English) Interior, 27.5 in. Width (Metric) Interior 69.9 cm Width (Metric) Platform 45.7 cm</p> <p>Controller Type Digital Motor Type DC brushless, Timer Range Continuous or timed peration from 0.1 minute to 999 hours</p>	<p>Platform dimensions: 18 x 18 in. (45.7 x 45.7cm)</p> <ul style="list-style-type: none"> <li>• Overall dimensions Lx W x H: 33x 27 x 40.5 in. (83.9 x 69.6 x102.9cm)</li> </ul> <p>Stackable Shakers with all accessories, Universal Platform with 125 ml Erlenmeyer Flask, 250 ml Erlenmeyer Flask, 500 ml Erlenmeyer Flask 1 L Erlenmeyer Flask</p>



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55	CO2 incubator - cycle 184 L with cylinder	<p>Direct Heating system must be available for Incubator. System should have option for Stainless Steel shelves for sample holding. Sturdy 3 Numbers</p> <p>Stainless Steel perforated shelves should be supplied. Shelves supports should be made of stainless steel and fits without any nuts and bolts.</p> <p>Shelves supports should be readily removed without any tools for easy cleaning, autoclaving, or adjustment. Dimension of each shelves should be 18 x 18 inch. Shelf load limit minimum 20 to 25 kgs for stationary. Heat Sterilization cycle of 140°C for 12-14 hours to safely kills all organisms within the chamber, including mold, yeast, mycoplasma, bacteria, and even difficult to eliminate spores. 'Overnight' cycle operation made possible by total cycle time of 12 -14 hours.</p> <p>Audible alarm should activates if the outer door is opened during the cycle and the temperature is 60°C (140°F) or greater to ensure safety in the lab</p> <p>System should require access code to initiate decontamination cycle thereby preventing accidental initiation of the cycle .</p> <p>The Microprocessor Control System should give clear cut written message for the errors should guide through the cycle with start-up and cycle status messages during decontamination phase.</p> <p>Post decontamination process the system should return to normal operating status without the need for manual cleaning.</p> <p>Class 100 HEPA filtered chamber airflow 100% filtration of chamber air every 60 seconds to clean room particulate and air borne contamination to class 100 air quality standards thereby providing constant protection against contaminations.</p> <p>Class 100 standard reached in under 5 minutes of door opening - air quality recovery provides near- immediate protection against particulates.</p> <p>The system should have Built-in preventive maintenance system with an adjustable timeframe to notify users when it's time to replace the filter.</p> <p>Snap-fit in-chamber HEPA filter should be easily removed without tools.</p> <p>System should have good quality inner door air light gasket which should be removable and cleanable, and adjusts continually to ensure a tight seal.</p> <p>All claims should be 3rd party tested and validatable with white papers available for both Class 100 and chamber Sterilization claims.</p> <p>Unique Filtered Air Exchange system - Minimizes the risk of condensation in the unit, even in hot humid ambient. Chamber condensation heightens the risk of contamination. 100% coved chamber comers to eliminate the comers and crevices that are difficult to clean and harbour contamination.</p> <p>Polished stainless steel chamber to provide a smooth, easy to clean surface</p> <p>Uniform direct heat surrounds sides, back, top, and bottom of chamber - Total coverage of chamber walls eliminates cold spots that can reduce temperature uniformity and produce condensation.</p> <p>Microbiological filters on all gas inlets and outlets and sample ports - Potential contamination sources are reduced</p> <p>Microprocessors control/monitoring system with displays for temperature and CO2. and alphanumeric message</p>	<ul style="list-style-type: none"><li>• Temperature Range 5°C above ambient to 50oC</li><li>• Temperature Uniformity ±0.3 oC @ 37 oC</li><li>• Interior Volume: Minimum 180 to 200 liters .</li><li>• CO2 : 0-20%. Control, Range better than ±0. 1 %, measures with TC sensor.</li><li>• Readability and Stability 0.1%</li><li>• Humidity : around 95% @ 37 oC (98.6F)</li></ul> <p>Capacity (English) 6.5 cu. ft.</p> <p>Certifications/ Compliance UL, cUL, CE Data Outputs</p> <p>Optional 4-20mA Description Single 184L incubator Capacity (Metric) 184 L Chamber Material Polished Stainless Steel</p> <p>CO2 Concentration Range 0 to 20% CO2 Sensor Technology TC Sensor Lighting LED</p> <p>Material Stainless Steel Oxygen Control None Relative Humidity &lt;90% at 37°C</p> <p>Temperature Range (Metric) Ambient +5°C to 50°C Type CO2 Incubator Humidity Source Water Pan</p> <p>Dimensions (D x W x H) Interior 20 X 21.3 X 26.8 in. (50.8 x 54.1 x 68.1 cm)</p> <p>Dimensions (L x W x H) 25 X 26.3 X 39.5 in. (63.5 x 66.8 x 100.3 cm)</p> <p>Weight (English) 260 lb.</p>
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		<p>centre which is easy to read, and easy to program with constant display of operating parameters and alphanumeric status messages Automatic electronic start up and automatic CO2 auto zero on a incubators to simplify procedures for easy start-up and use</p> <p>Programmable tracking alarms for temperature and CO2. Alarms should be custom configurable.</p> <p>All probes and sensors located inside the chamber for faster recovery than with remote located sensors</p> <p>Field reversible inner and outer doors so that the unit can be easily configured for use anywhere in the lab</p> <p>Dual-directed air flow to provide quicker temperature recovery and better uniformity</p> <p>Units should be stackable with stacking brackets to maximize lab space.</p> <p>System should have as optional of humidity monitoring, automatic gas tank switchers, antimicrobial solid copper interiors, data output ports</p> <p>Two stage Stainless steel CO2 Gas Regulator should be provided, compatible for CO2 Incubator.</p> <p>CO2 Gas Cylinder for around 15 to 20 Kgs with CO2 Gas purity of 99.9% Research or Medical grade.</p> <p>Voltage stabilizer capacity should be 2KVA. Incubator is UL listed, CSA Certified and CE Marked</p> <p>Warranty Two Years</p> <p>Should have Service facility in Eastern Region.</p> <p>Quoted model's specification must be available in the Manufacturers Website.</p> <p>Customized manufacturing model should not be accepted without any Quality control certified or third party validation certification.</p>	
56	Inverted Microscope	<p>Applications (30° inclined, interpupillary 48mm~75mm) having LED light illuminator, quintuple revolving nosepiece, coaxial coarse (stroke : 37.7mm per rotation) &amp; fine (stroke: 0.2mm per rotation) adjustment, plain stage (l 60x250mm) with glass insert, auxiliary stage 70x180mm, Condenser LWD 72mm, Long working distance Plan Infinity Brightfield Objectives 4x/0.1 (W.D 18mm) &amp; 40x/0.6 (W.D 2.6mm - Cover Glass 1.2mm) And Phase Contrast Objectives 10x/0.25 (W.D 10mm) &amp; 20x/0.4 (W.D 5.1mm) with phase annulus plate (10x-20x, 40x) &amp; High eye point, extra wide field eyepiece EW10x (F.N.22) standard set complete. 1,76,525 Features: Long Working Distance Plan Infinity Optics, Pre-Centered Phase Annulus, Trinocular Port In Standard Unit, Excellent Field Flatness ACCESSORIES GIVEN: long working distance Plan Infinity Phase Contrast objective 40x/ 0.6 with annular plate, Attachable Mechanical Stage X -Y Coaxial Control, moving range 120 X 78 mm, Petri dish holder (38 mm dia.), slide glass holder &amp; Terasaki Holder (38 mm dia.)</p>	With MagCam DC-10
<b>B</b>	<b>BOTANY DEPT</b>		



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1	Upright LED Binocular Microscope	<ul style="list-style-type: none"><li>. Microscope frame for transmitted light microscopy, With Built in Koehler illumination with field iris diaphragm ring built in with transmitted light Halogen / LED, High Sensitivity Focusing Knob Fine adjustment: 0.1 mm per turn. Coarse adjustment: 15 mm per turn. Stroke: 25 mm (1micro m gradiation), UIS Optical System or Better</li><li>. Precentered Lamp housing incorporating a white LED Lamp house, excellent color reproduction, LED life Min. 20,000 hours, with connecting cable</li><li>. Ergonomic telescopic tilting binocular tube, 0° to 25 tilting, including eyepiece caps</li><li>. Set of Wide field 10X, FN22 and 10X, FN22, focusable eyepieces of better</li><li>. Ceramic surface mechanical stage with right-hand low drive control (long type), provision for adjusting the X- and Y-Axis movement knob tension. Stage can be rotated upto 230° or better with Thick type Specimen Holder for two specimen</li><li>. Universal condenser for Bright Field &amp; Darkfield applications with N.A. 1.1 or Better</li><li>. Quintuple higher Revolving Nosepiece with Objectives:<ul style="list-style-type: none"><li>Plan achromat objective 10X/0.25, WD 10.6 Better</li><li>Plan achromat objective 20X/ 0.4, WD 1.2 or Better</li><li>Plan achromat objective 40X/0.65, WD 0.6 (spring) or Better</li><li>Plan achromat objective 100X/1.25, WD 0.13 (spring, oil) or Better</li></ul></li><li>. The Microscope should be upgradable to DIC attachment, minimum 8 position Fluorescence Turret and Karyotyping and FISH applications, Manual Karyotype software with database should be quoted in optional</li><li>. Microscope, and Objectives should be from same manufacturer, the models and specification should be available in OEM website.</li><li>. Dust Cover and Immersion Oil should be provided at no extra cost</li></ul>
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2	Microscope	<ul style="list-style-type: none"><li>. It should have an Infinity Optical system.</li><li>. Microscope frame for transmitted microscopy with color corrected LED illuminator Built in 0.5 W LED illumination system, to avoid bluish light.</li><li>. Stage height adjustment mechanism</li><li>. Movement distance per scale of fine adjustment knob: 2.5 <math>\mu</math>m, Movement distance per round of fine adjustment knob: 0.3mm, Total movement range: 15mm</li><li>. Microscope should have a dedicated focus lock mechanism to prevent the sample from damage by heating the objective.</li><li>. Pre-focusing knob provided, tension of the coarse adjustment knob adjustable, 360 degree rotatable Binocular tube with butterfly design eyepiece tube &amp; Field number 20 or higher, Tube tilting angle 30°</li><li>. Interpupillary distance adjustment range 48 to 75 mm ,a pair of eyepiece 10X ( F.N.20) , eye point height adjustment , inwards facing quadruple revolving nosepiece.</li><li>. Right-handle wire movement Mechanical fixed stage 120 x 132 mm, Movement range X direction: 76 mm x Y direction: 30mm, can hold haemocytometer.</li><li>. Abbe condenser N.A. 1.25, Aperture is iris diaphragm Built in</li><li>. PLAN Objectives 4X/N.A.01., Antifungal Quality</li><li>. Plan 10X / N.A.0.25, Antifungal Quality</li><li>. Plan 40X N.A. 0.65, Antifungal Quality</li><li>. Plan 100X / N.A. 1.25, Antifungal Quality</li><li>. AC adapter, fixing belt for transportation</li><li>. Ergonomic grips add safety when retrieving the microscope from any high storage place or moving from one location to another.</li><li>. A rack-less stage and stage cover give safety and longtime operation.</li><li>. Adjustable eye point provides high comfort to an user group with variable heights during long hours usage of the system.</li><li>. A locking pin facility in the observation tube is an most important and admired feature to avoid accidental displacement of tube from its alignment/ breakage of tube after falling down, especially when the same is being used by students/ technicians in the lab.</li><li>. LED light source with high color reproducibility for better imaging and contrast. It reduce blue Colour and preserve vivid colors on HE staining</li><li>. Built in security slot to attach the anti theft cable which is more require for student microscope</li><li>. Both hand focusing knob to focus preciously and ergonomic</li><li>. Microscope should be upgradable to dark field attachment.</li><li>. Flat field of view for better imaging view.</li><li>. Higher field of view.</li><li>. A storage compartment on the back of the microscope makes it easy to store the cable and safety.</li><li>. Microscope should have Provision to attach antitheft cable at the back.</li><li>. Minimum 500 installations should be there in eastern region of India.</li><li>. Technical evaluation will be done based on the physical demonstration of the quoted model.</li><li>. International Certificate must be provided ISO &amp; IEC must be provided.</li></ul>
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3	Binocular Microscope LED with camera	<ul style="list-style-type: none"> <li>. A single compact unit including: inverted microscope, digital color camera and LCD/LED display.</li> <li>. Long life LED illumination (up to 50,000 hours).</li> <li>. The system should include a color camera built-in to the microscope base.</li> <li>. The system should include a 4-position objective turret.</li> <li>. The system should accommodate a minimum of 4 objectives at once.</li> <li>. The system can include four different phase-contrast LWD objectives (4x, 10x, 20x and 40x).</li> <li>. The system includes a rack and pinion focus mechanism.</li> <li>. The system includes an integrated high-sensitivity color interline CMOS camera with 3.1MP with 3.2 um pixels.</li> <li>. The system includes a mechanical, universal stage.</li> <li>. The system accommodates an optional mechanical stage for multi well plates or other vessels.</li> <li>. The entire system footprint, including all computer and monitor components does not exceed 21" high x 16" deep x 12.5" wide.</li> <li>. The system includes a high-resolution color LCD/LED display with adjustable tilt.</li> <li>. The system can be easily moved in and out of a cell culture hood or glove box.</li> <li>. The system consumes less than 20 W/h with all illumination sources turned to the on position.</li> <li>. The system includes two USB output ports.</li> <li>. The system provides direct output to a USB storage device.</li> <li>. The system generates the following output file formats: .jpg, .bmp .png and .tif.</li> </ul>	
4	Hot Air Oven (Digital)	<p>Specification</p> <ul style="list-style-type: none"> <li>. It should have CE Certification &amp; ISO Certification</li> <li>. It should have tripled walled construction.</li> <li>. It should have 3" High grade heavy glass wool insulation ensures stable temperature &amp; reduced energy consumption.</li> <li>. It should have motorized blower on top side of the chamber develops unique air flow system which ensures maximum uniform temperature distribution inside the chamber. Unique air flow assures quick recovery after door openings</li> <li>. It should have 1/12 HP, TEFC, F-class insulation, Single Phase, 1440 RPM, 230 Volts</li> <li>. It should have S. S. tubular heating elements used on side walls to maintain uniform condition inside the chamber.</li> <li>. It should have safety cum stand by thermostat to cut off the heater supply in case of overshoot of temperature.</li> <li>. It should have single door fitted on heavy cast and chromium plated hinges with spring.</li> <li>. It Should have an adjustable tray at a height of 25mm</li> <li>. It should have Specially designed Stainless-Steel Rod Trays which ensure uniform temperature distribution</li> <li>. It should have 230 V AC, Single Phase, 50 Hz.</li> <li>. It should have inside S.S. 304 mirror finish and outer Mild steel (CRCA) sheet with powder coated.</li> <li>. It should have Temp. Range 5 °C above ambient to 300 °C</li> <li>. It should have Temperature Accuracy: <math>\pm 0.2^{\circ}\text{C}</math></li> <li>. It should have Temperature Uniformity: <math>\pm 1^{\circ}\text{C}</math></li> <li>. It should have Safety digital temperature controller with accessories</li> <li>. It should have Digital Timer 0-999 (Hr. / Min / Sec) with Alarm</li> <li>. It should have Imported Microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp;</li> </ul>	





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		process value for precise control of temperature. . Litre capacity- 43/91/122/216/324	
5	Distiller	Capacity - 6ltr	
6	Permanent Slides (Common)	Standard.	
7	Conical Flask	250ml	
8	Measuring cylinder	100ml	
9	Beaker	250 ml	
10	Beaker	500 ml	
11	Simple Slides	Standard.	
12	Specimens Bottle	500ml	
13	Blades	Surgical	
14	Test Tube Brush	Standard.	
<b>C</b>	<b>CHEMISTRY DEPT</b>		
1	Melting point apparatus	Standard.	
2	Hot Plate for culture media preparation	Temperature Control - Hydraulic thermostat Protected thermometer - 0°C to 130 °C Hot plate surface - Protected by chemically treated aluminum, with heating elements distributed throughout the hotplate's surface External case - Enameled, resistant against corrosive chemicals. Quality Standards - ISO, CE	
3	Water bath (12 holes)	Standard.	
4	Heating mantle 500ml with E/R	Standard.	
5	Porcelain dish 3"	Standard.	
6	Digital Thermometer	-50 C to +150 C Measurement range at interval of 0.1 C	
7	Reagent bottle	250ml	
8	Burette	50ml	
9	Pipette (5ml/10ml/25ml)	Standard.	
10	Digital melting point	Standard.	



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11	Glass condenser	300mm	
12	Rotor/Shaker	<ul style="list-style-type: none"> <li>. Inside S.S. 316 mirror finish seamless pot (argon welded) which avoid water leakage problems, Outer S.S. 304 with dull smooth buff finish.</li> <li>. Temperature Range Should be 5°C above ambient to 95°C</li> <li>. Temperature Accuracy should be <math>\pm 0.50^\circ\text{C}</math></li> <li>. Imported microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp; process value for precise control of temperature.</li> <li>. Shaking Speed should be from 40 to 120 RPM</li> <li>. Digital RPM Controller &amp; Indicator should be present.</li> <li>. Digital Timer should indicate 0-999 (Hr / Min / Sec) with Alarm</li> <li>. It Should have ISO and CE/USFDA Certification</li> <li>. Horizontal Model, with Double Walled Construction</li> <li>. 2" Thick PUF Insulation should be provided</li> <li>. It should work with 230V AC, single Phase 50Hz</li> </ul>	
13	Bunsen burner	<p>Mains Input Supply Voltage - 230V AC at 50/60Hz.</p> <p>Maximum Operating Temperature - <math>800^\circ\text{C}</math></p> <p>Case Construction - Stainless steel-Brushed finish.</p> <p>Heating Element Construction - Resistance coiled wire and ceramic coned former.</p> <p>Quality Standards - ISO, CE</p>	
14	Hot Air Oven (Digital)	<p>Specification</p> <ul style="list-style-type: none"> <li>. It should have CE Certification &amp; ISO Certification</li> <li>. It should have triple walled construction.</li> <li>. It should have 3" High grade heavy glass wool insulation ensures stable temperature &amp; reduced energy consumption.</li> <li>. It should have motorized blower on top side of the chamber develops unique air flow system which ensures maximum uniform temperature distribution inside the chamber. Unique air flow assures quick recovery after door openings</li> <li>. It should have 1/12 HP, TEFC, F-class insulation, Single Phase, 1440 RPM, 230 Volts</li> <li>. It should have S. S. tubular heating elements used on side walls to maintain uniform condition inside the chamber.</li> <li>. It should have safety cum stand by thermostat to cut off the heater supply in case of overshoot of temperature.</li> <li>. It should have single door fitted on heavy cast and chromium plated hinges with spring.</li> <li>. It Should have an adjustable tray at a height of 25mm</li> <li>. It should have Specially designed Stainless-Steel Rod Trays which ensure uniform temperature distribution</li> <li>. It should have 230 V AC, Single Phase, 50 Hz.</li> <li>. It should have inside S.S. 304 mirror finish and outer Mild steel (CRCA) sheet with powder coated.</li> <li>. It should have Temp. Range <math>5^\circ\text{C}</math> above ambient to <math>300^\circ\text{C}</math></li> <li>. It should have Temperature Accuracy: <math>\pm 0.2^\circ\text{C}</math></li> <li>. It should have Temperature Uniformity: <math>\pm 1^\circ\text{C}</math></li> <li>. It should have Safety digital temperature controller with accessories</li> <li>. It should have Digital Timer 0-999 (Hr. / Min / Sec) with Alarm</li> <li>. It should have Imported Microprocessor based auto tuned PID controller with CE mark &amp; dual display of set value &amp; process value for precise control of temperature.</li> <li>. Litre capacity- 43/91/122/216/324</li> </ul>	
15	Conical flask (250ml)	250ml	
16	Beaker funnel	250ml	
17	Beaker funnel	500ml	



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18	Test tube Holder S.S (Stainless steel)	Standard.	
19	Bunsen Burner brass C.P without stop cock	Standard.	
20	Spirit Lamp Brass : Superior Quality 4Oz	Standard.	
21	Tripod Stand Z.P Legs Round Top: size 6"x4"	Standard.	
22	Tripod Stand Z.P Legs Round Top: size 7"x4"	Standard.	
23	Tripod Stand Z.P Legs Round Top: size 8"x4"	Standard.	
24	Wire Gauge :with Double . Asbestos 14x 14cm	Standard.	
25	Test tube Brush : Nylon ( 50pcs x lbox) size- 6"	Standard.	
26	Test tube Brush: Nylon ( 50pcs x lbox) size- 7"	Standard.	
27	Test tube Brush: Nylon ( 50pcs x lbox) size- 8"	Standard.	
28	Test tube Brush : Nylon ( 50pcs x lbox) size- 9"	Standard.	
29	Test Tube Brush semi Micro Size : 6" for H.Meter	Standard.	
30	Bottle Brush: Nylon (50pcs x lbox), size- 12"	Standard.	
31	Bottle Brush: Nylon (50pcs x lbox) , size- 15"	Standard.	
32	Bottle Brush: Nylon (50pcs x lbox), size- 18"	Standard.	
33	Bottle Brush: Nylon (50pcs x lbox) , size- 24"	Standard.	
34	Pipette Brush, size:20	Standard.	
35	Flask Brush: Nylon	Standard.	
36	Test tube Brush : hair size : 8"( 50pcs pack)	Standard.	
37	Bottle Brush: hair ( 50pcs x lpack), size- 12"	Standard.	
38	Bottle Brush: hair ( 50pcs x lpack), size- 15"	Standard.	
39	Bottle Brush: hair ( 50pcs x lpack), size- 18"	Standard.	
40	Petri Dish Box S.S Jointed: for 4" petri Dish	Standard.	



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41	Petri Dish Box S.S Joint less : for 4" petri Dish	Standard.	
42	Copper Turning (500gms x 1pkt)	Standard.	
43	Iron Filling (100gms x pkt)	Standard.	
44	Iron Filling (250gms x pkt)	Standard.	
45	Iron Filling (500gms x pkt)	Standard.	
46	Deep form Basins with Spout, cap. - 170ml	Standard.	
47	Fliter paper Circle: 'A' Grade Box in 100 circles, size - 12.5cms	Standard.	
48	Litmus Paper Book Red/ Blue Dr. Watts	Standard.	
49	Lead Acetate Starch Iodide T.Paper	Standard.	
50	Platinum Wire	Standard.	
51	Watch Glasses: size - 3"	Standard.	
52	Test Tube Stand: 6 holes Teak wood	Standard.	
53	Basins (china Dish), size- 60mm	Standard.	
54	Rubber tubing, size 5mm	Standard.	
55	Beakers Low Form, size- 250ml	Standard.	
56	Conical flasks, size - 250ml	Standard.	
57	Flat Bottom Flask , size- 250ml	Standard.	
58	Round Bottom Flask, size- 250ml	Standard.	
59	Volumetric Flasks Stoppard, size- 250ml	Standard.	
60	Funnel's 60 Angle plain, dia- 6.25cm	Standard.	
61	Gas generating Kipps Apparatus, size- 1000ml	Standard.	
62	Measure Glass: Graduated, size- 100ml	Standard.	
63	Measure Cylinder : Graduated, size- 100ml	Standard.	
64	Test tubes Borocillicate Glass, size- 15mm x 150mm	Standard.	
65	Burette with Glass : stop cock screen printing, size- 100ml	Standard.	
66	Volumetric Flasks Borocillicate, size - 250ml	Standard.	





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67	Funnel Borocillicate Glass, size - 3"	Standard.	
68	Pipette Graduated B/ Glass, size - 25ml	Standard.	
69	Beakers B/Glass Graduated , size 100ml	Standard.	
70	Beakers B/Glass Graduated , size 250ml	Standard.	
71	Conical flask B/Glass, size - 250ml	Standard.	
72	Round Bootom Flask Borocillicate Glass, size- 250ml	Standard.	
73	Flat Bottom flask Borocillicate glass, size-250ml	Standard.	
74	Borocillicate Tubes from 6mm to 68mm	Standard.	
75	Borocillicates rods from 5m to 16mm	Standard.	
76	Measuring Spoon, size 1.25ml, 2.5ml, 5ml, 15ml	Standard.	
<b>D</b>	<b>PHYSICS LAB</b>		
1	Vernier Calipers	Standard.	
2	Screw gauge	Standard.	
3	Physical balance	Standard.	
4	Lenses	Convex, Concave	
5	Mirror	Convex, Concave	
6	Optical bench	Standard.	
7	P O Box (6 dials)	Standard.	
8	Battery eliminator	3 Amp	
9	Ammeter	Different Range	
10	Voltmeter	Different Range	
11	Copper wire	Standard.	
12	Galvometers	Standard.	
13	One way key	Standard.	
14	Bar Pendulum (Compound )	Standard.	
15	Kater's pendulum (S.S)	Standard.	
16	Stop clock	Standard.	
17	Thermometer (1/10C)	Standard.	
18	Meter Scale	1 metre (wooden)	
19	Dip circle	Standard.	
20	Travelling microscope	Vertical & Horizontal movement type stainless scale in a wooden case	
21	Glass beakers	250ml	
22	Glass beakers	500ml	
23	Meter bridge	Standard.	
24	Standard resistance	Standard.	
25	Resistance box	Standard.	
26	Rheostat	Standard.	
27	Potentiometer	Standard.	
28	Glass slab	Standard.	



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29	Momarti of incitia (table)	Standard.	
30	Rigidity modulus	Complete Set	
31	Lycopodium Powderer	500gm	
32	Digital Electrical Balance 500gms (CAH 503/Contech)	Standard.	
33	Reading Telescope	Standard.	
34	Meter Telescope ( 1meter long )	Standard.	
35	Calliper vernier: 5" C.P with Wheel	Standard.	
36	Calliper vernier: 5" S. Steel with Wheel	Standard.	
37	Callipers Vernier: I.M.E Type in velvet case	Standard.	
38	Callipers Vernier: Demonstration Model	Standard.	
39	Macro Screw Guage : pitch ½ mm size: 15mm	Standard.	
40	Macro Screw Guage : pitch ½ mm size: 20mm	Standard.	
41	Macro Screw Gauge : pitch ½ mm size : 25mm	Standard.	
42	Cubes of Metal (1cm)	Standard.	
43	cubes of Metal (2cm)	Standard.	
44	Pendulum Bob of different Metal ½" (12mm)	Standard.	
45	pendulum Bob of different Metal¾" (18mm)	Standard.	
46	pendulum bob of different metal 1" (25mm)	Standard.	
47	Battery Hydrometer	Standard.	
48	Spirit Level : plastic size 6" (15cm)	Standard.	
49	Boyle's Law Appts. w/o R. Tubing and Mercury	Standard.	
50	Barometer Digital cum Altimeter / compass	Standard.	
51	Rain Gauge 12" long 5" Dia G.I Sheet	Standard.	
52	Victor Mayer's Apps : B/Glass w/out Jacket	Standard.	
53	Bending of Beam Apparatus	Standard.	
54	Torsion Pendulum : 12.5cm dia	Standard.	
55	Pulley Arrangement	Standard.	
56	Simple Pendulum	Standard.	



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57	Young's Modulus Appts. Iron with Weight	Standard.	
58	Glass Prism	Standard.	
59	Prism :25 x 25mm H.T - Borocilicate Crown Glass	Standard.	
60	Prism :25 x 25mm H.T - Dense Flint Glass Prisms	Standard.	
61	Prism : 25 x 25mm H.T - Extra Dense Flint Glass Prism	Standard.	
62	Prism :25 x 25mm H.T - Dbl. E.D.F Glass Prism	Standard.	
63	Hollow Glass Prism with Stoppered- size 38 x 38x 25 mm	Standard.	
64	Hollow Glass Prisms 38x 38mm	Standard.	
65	Hollow Glass Prisms 50x 50mm	Standard.	
66	Convex lens - Dia 2" with focal length 5 to 6 cms	Standard.	
67	Convex lens - Dia 2" with focal length 10 cms	Standard.	
68	Convex lens - Dia 2" with focal length 15cms	Standard.	
69	Convex lens - Dia 2" with focal length 20 to 100cms	Standard.	
70	concave lens - Dia 2" with focal length 5 to 6cms	Standard.	
71	Concave lens - Dia 2" with focal length 10 cms	Standard.	
72	Concave lens - Dia 2" with focal length 15 cms	Standard.	
73	Concave lens - Dia 2" with focal length 20 to 100cms	Standard.	
74	Turning Forks: C.P Set of 8 in Box	Standard.	
75	Magnetic Field Apparatus	Standard.	
76	Simple cell ( Voltaic Cell) with Complete Set	Standard.	
77	Galvanometer with Stand DC 30-0-30	Standard.	
78	Am - meter with stand DC 1.5to 10 Amp	Standard.	
79	Potentionometer : 4 wires college quantity	Standard.	



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80	OHM'S Law Appts .with Rheostat and DC Meter	Standard.	
81	Rheostat: 4.3cm (1¾) dia tube Amps. 8.0 to 4.0 - size 15cm	Standard.	
82	Commutators : round four way plug key	Standard.	
83	Daniel Cell substitutes	Standard.	
84	Step down Transformers: input 220V, output: 12V AC 1Amp	Standard.	
85	Wash Bottles 1000ml	Standard.	
86	Specimen Jar 50mm x150mm	Standard.	
87	Pipette stand for 94 pipettes	Standard.	
88	cylinders 100ml	Standard.	
89	cylinders 500ml	Standard.	
90	cylinders 1000ml	Standard.	
91	Experimental Tables L x B x H (6ft x 4ft x 3ft)	Standard.	
92	Experimental Tables L x B x H (5ft x 3ft x 2.8ft)	Standard.	
93	Experimental Tables L x B x H (4ft x 3ft x 2.8ft)	Standard.	
94	Wooden Sitting Stools 1.3ft x 1ft x 2ft	Standard.	
95	Sonumeter	Standard.	
96	Cathometer	Standard.	
97	Sodium vapour lamp	Standard.	
98	Mercury vapour lamp	Standard.	
99	Photo cell	Standard.	
100	Torsion Balance	Standard.	
101	Torsion Pendulum	Standard.	
102	Laser Trainer Kit	Standard.	
103	Optical Bench	Standard.	
104	Plane Diffracting Grating	Standard.	
105	Plane Glass Plates	Standard.	
106	Bi-Prism	Standard.	
107	Digital Multimeter	Standard.	
108	Digital Electrical Balance	Standard.	
109	Frequency Generator	Standard.	
110	Galvanometer	Standard.	
111	Slotted Weights	Standard.	
112	Condensing lens	Standard.	
113	Bar Magnet	Standard.	
114	Slide Callipers	Standard.	
115	Pulley arrangements	Standard.	
116	Digital Barometer cum Altimeter	Standard.	





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117	Resistors	Standard.	
118	Capacitors	Standard.	
119	Inductors	Standard.	
120	Voltmeter	Standard.	
121	Ammeter	Standard.	
122	Battery (Eliminator)	Standard.	
123	Clamp	Standard.	
124	Rubber pad	Standard.	
125	Paper Rider	Standard.	
126	Weights Hanger/Hook	Standard.	
127	Magnetic Compass needles	Standard.	
128	Drawing Boards	Standard.	
129	Fixing Pins	Standard.	
130	Connecting Wires	Standard.	
131	Meter Scales	Standard.	
<b>E</b>	<b>FABRICATION</b>		
1	Stick Welding	Standard.	
2	Measuring Tape	Standard.	
3	Wire Cutter	Standard.	
4	Stainless Steel Ruler	Standard.	
5	Pliers	Standard.	
6	Screw Drivers	Standard.	
7	Welding Gloves	Standard.	
8	Head Gear	Standard.	
9	Clear Face Shield	Standard.	
10	Welding Goggles	Standard.	
11	Planner	Standard.	
12	Oxygen gas with cylinder	Big	
13	Acetyline gas with cylinder	Big	
14	Hose pipe for Acetyline (50Mtr)	Standard.	
15	Hose pipe for Oxygen (50Mtr)	Standard.	
16	Oxy-acetyline welding torch	Standard.	
17	Pressure regulator with valve (O2 and Acetylin)	Standard.	
18	Electrode	10	
19	Filler rod (Kg)	Copper	
20	Leather Apron	Standard.	
21	Wire brush	Standard.	
22	MS Flat	2mm x 1"	
23	MS Flat	5mm x 1"	
24	Metal working table	Standard.	
25	Hand shield	Standard.	
26	Filter glass	Standard.	
27	Transparent glass	Standard.	
28	Welding cable (100Mtr)	50mm sq	
29	Electrode holder for arc welding	Standard.	
30	Gas cutting torch	Standard.	
31	Steel Almirah	7 ft	



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<b>F</b>	<b>CLAY MODELLING</b>		
1	Model Casting	Standard.	
2	Wet Plaster Casting	Standard.	
3	Clay Modelling Tool Set	Standard.	
<b>G</b>	<b>DESIGN STUDIO</b>		
1	Plotter	Standard.	
2	Drafting Table	SUPPLY AND INSTALLATION OF TABLE IN SIZES OF 2400MM (L) X 900MM (W) X 750MM (H) CONSISTING OFFOLLOWING SPECIFICATION:WORK TOP - WORK TOP SHALL BE MADE OF 25MM THICK PRE-LAMINATED PARTICAL BOARD WITH DECORATIVE LAMINATION ON ONE SIDE AND BALANCING LAMINATION ON OTHER SIDE CONFIRMING TO IS 12823: 1990, ALONG WITH 2 MM THICK MACHINE PRESSED PVC EDGE BANDING GLUED WITH INDUSTRIAL ADHESIVE AND MONOLITHICALLY DIFFUSED WITH BOARD ON EXPOSED EDGES. UNDERSTRUCTURE SUPPORTING FRAME SHALL CONSISTS OF THREE METAL C-LEGS (TWO AT EITHER ENDS AND ONE IN MIDDLE OF TABLE) AND JOINED BY TWO NUMBERS HORIZONTAL CONNECTOR MADE OF TUBULAR SECTION 40MM X 40MM X 1.6MM (WALL THICKNESS) CONFIRMING TO IS 4923:1997. THE ENTIRE METAL FRAME SHALL BE FINISED WITH EPOXY POLYSTER POWDER COATED DFT 50-60 MICRON. C-TYPED METAL LEGS SHALL BE KEPT 150 MM INSIDE FROM FROM END OF TABLE. LEGS SHALL BE FITTED TO THE GROUND WITH M8 SCREW LEVELER WITH THE HEIGHT ADJUSTMENT UP TO 12MM TO 15MM.	
3	Projector & Motorised Screen	Display technology, DLP Resolution, WUXGA (1920x1200), Contrast ratio 3,00,000:1 Native aspect ratio16 : I 0, Keystone correction - horizontal +-30°, Keystone correction - vertical +-30°, Displayable colours (millions), 1073.4, Horizontal scan rate 5k~l 40kHzKhz, Vertical scan rate, 24~l 20HzHz, LASER life 30,000 hours, Projection distance 1.3m - 7.8m, Zoom 1.6 Inputs 2 x HDMI 2.0, 2 x VGA, 1 x Composite video, 2 x Audio 3.5mm, 1 x USB-A power 1.5A Outputs 1 x HDMI 2.0, 1 x Audio 3.5mm, 1 x 3D sync, 1 x 12V trigger, Control I x HD Base T 4K, 1 x RJ45, I x RS232, Dimensions (W x D x H) 374 x 302 x 117. Screen Size 72 x 96 inch, Diagonal size 180°, Viewing area H x W mm 1829 x 2358	



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4	Interactive Flat Panel	<p>Make &amp; Model - Any reputed brand with presence in Indian Market for at least 20years</p> <p>Diagonal Size - 65, 75, 86 "or Higher</p> <p>Resolution - 3840 x 2160 or more</p> <p>Brightness - Min 450nits (with glass) / 500nits (without glass)</p> <p>Panel Technology - IPS (Direct LED)</p> <p>Viewing Angle - 178 degree (H) / 178 degree (V)</p> <p>Dynamic Contrast Ratio - 30,000:1 or higher</p> <p>Color Depth - 10-bit or higher</p> <p>Response Time - 8 ms or less</p> <p>RAM - 8GB or higher</p> <p>ROM - 128GB or higher</p> <p>Input Ports (minimum) - HDMI-2, USB- 2, OPSSlot-1</p> <p>Output Port - Audio Port -1</p> <p>External Control - RS-232, RJ-45</p> <p>Operation Hour - 16 Hrs</p> <p>Life - Min 50,000 Hrs</p> <p>Wi-Fi - Wi-fi dongle to be provided along with IFP(Same brand preferred)</p> <p>Speaker - Built in Speaker (20 Wx2+16W Subwoofer) or higher</p> <p>Detection Method - IR</p> <p>Plug In USB web Cam - Compatible</p> <p>Pen - 2 Touch pens</p> <p>OS - Min Android 15.0 or better</p> <p>Certifications - BIS, FCC, CE/CB/UL/ROHS/ TUV</p> <p>Warranty – OEM 3 years</p> <p>Accuracy - 2mm or less</p> <p>Multi Touch Points - 50 Points or Higher</p> <p>Embedded Interactive White Board Software - PC Less</p> <p>Interactive White Board mode feature for teaching</p> <p>Interactive &amp; Important Features - Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar, Device Management System</p> <p>Built in System Processor - Dual Core Processor with 1.5GHz or higher</p> <p>Power Consumption (Max.) - 350W or less</p> <p>Operating Temperature - 00~400</p> <p>Operating Humidity - 10~80%</p> <p>Accessories - 2 Pens, Power cable</p> <p>Installation - Wall mount</p> <p>IFP Should Support - PPT, Word, PDF, Image, Video play</p> <p>*Interactive Flat Panel with Google EDLA Certified</p> <p>Android 15 OS</p> <p>8GB RAM   128 GB Internal Memory</p> <p>SGS Certified IP5X Dustproof</p> <p>TUV certified eye care</p> <p>65 W USB Type-C</p> <p>50 Touch minimum</p> <p>Brightness: 350nits (with glass) / 400nits (without glass)</p> <p>Color Depth- 10 Bit</p> <p>Built in speaker: 56W (20 wx 2 + 16W Sub-Woofer)</p> <p>Built In Microphone.</p> <p>Hardness: 9H</p> <p>Thickness: Tempered, 3.2 mm</p> <p>Accessories (Standard)- Remote Control, Power Cord (by region), Touch pen, Quick Start Guide, Regulation Sheet, Touch Cable (USB to USB,) HDMI cable, VGA (D-sub 15pin) Cable, Type C Cable, Wall mount</p> <p>Optional Accessories: OPS- i5000 - i5, 12th Generation (Windows 11 Professional)</p>
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		<p>OEM should have presence in Assam &amp; North East market from last 10years  OEM must have presence in India for more than 20 years (Certificate of Incorporation required).  The manufacturer must have minimum Annual Turnover of Rupees 400+ Crores  OEM should have Survive centre in any state of the Seven Sister (states) for more than 10 years.  OEM must have onsite service to entire North East  OEM Should have BIS  OEM Should have presence in more than 100 countries.</p>	
5	Laser Cutter	Standard.	
<b>H</b>	<b>CIVIL TEST LAB</b>		
1	Slump Cone	Dia- Top = 100mm, Base = 200mm	
2	Steel Tape	30 metre	
3	Dumpy Level with Tripod Stand	Standard.	
4	Levelling Staff	Standard.	
5	Theodolite	Standard.	
6	Trowel	Standard.	
7	Shovel	Standard.	
8	Steel Float	Standard.	
9	Steel Plate	Standard.	
<b>I</b>	<b>CARPENTRY</b>		
1	Hacksaw	Standard.	
2	Jack Plane	(Iron/Wood)	
3	File (with different type)	Standard.	
4	Chisel (with different type)	Standard.	
5	Puncher (Set wise)	Standard.	
6	Pressure Measurement Gauge	Standard.	
7	Semi Protractor	Standard.	
8	Snipe Cutter	Standard.	
9	Measuring Tape	Standard.	
10	Metal Pliers	Standard.	
11	Steel Ruler	30cm/12"x25mmx1.0mm	
12	Steel Ruler	60cm/24"x25mmx1.0mm	





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13	Tri-Square	300mm blade length	
14	Clamper	(Table Clamp) Table Viuce with clamp Deluxe model	
15	Allen Key (Set wise)	Standard.	
16	Spanner	Fixed/Adjustable	
17	Hammer	Wood/Iron	
18	Hand Driver	Standard.	
19	Screw Driver	Standard.	
20	Saw	Standard.	
21	Anvil	Standard.	
22	Bench vice Cross rib 125mm jaw width, Fixed base	Standard.	
23	Drill bit: Jobber series ( 1mm to 13mm) set of 25	Standard.	
24	Digital vernier calipper (inside/outside type) : 0-300mm	Standard.	
25	Digital vernier calipper: 150mm	Standard.	
26	Digital vernier calipper: 200mm	Standard.	
27	Digital vernier calipper 0 -300mm	Standard.	
28	Screw micrometer	(Outside micrometer) Material: Stainless Steel Hard & Cast Iron Casting Least Count: 0.01mm Graduation: Top Side: 0-25 mm Marked Standard: IS:2967 an outside micrometre made of cast steel with a chrome-plated head assembly. The least count is 0.01mm. The External Micrometer is used to check the thickness of any part. It is very useful in workshops, tool rooms and inspection labs. Each micrometre is packed in a plastic case with a master gauge and adjustment spanner. Each Micrometer comes with a Calibration Certificate.	
29	Screw Micrometer (Outside micrometer) Digital	Standard.	
30	Dressed scantling pine (6' x 2half" x 1 half)	Standard.	
31	Bevle chisel with handle 1"	Standard.	
32	Mortize Chisel 4PC box pack	Standard.	
33	Try square pack of 4 box pack	Standard.	
34	Marking gauge	Standard.	
35	Mallet	Standard.	
36	Tenor saw	Standard.	
37	Oil stone for sharpening	Standard.	
38	Triangle saw file pack of 3 box pack	Standard.	
<b>J</b>	<b>SURVEY LAB</b>		
1	PRISMATICCOMPA SS WITH TRIPOD	Made of brass with aluminium ring, engine divided to read 30 minutes with fine agate centre, well magnetized needle, automatic lifter and prism reading, hinged coloured shades and reflector packed in fibre case with tripod stand having	



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		ball and socket head made of aluminium. With aluminium stand.	
2	PLANE TABLE WITH WOODEN STAND AND ACCESSORIES BOX	Made of pine wood with hard wooden battens at back having thorough slots for screws and washers nut for clamping. With all the accessories such as Brass Plum-bob, Brass Plumbing-fork, Brass Spirit Level, Brass Alidade, Al. Trough Compass, and canvas cover. AS PER IS SPECIFICATION NO. IS2539-1963.	
3	MEASURING TAPE (Non Metallic)- 30M	Measuring metallic tape 30M	
4	DUMPY LEVEL	Internal focusing telescope having 3 foot screws leveling base with locking arrangement, diaphragm etched on glass with Stadia 1:100 screw focusing eye piece, highly sensitive sprits bubbles, aperture not less than 3.76 cm. Magnification 38X, fitted with magnetic compass having reflector. Kept in PVC box with aluminium Floding Stand Length- 228mm and Model-DL-9	
5	VERNIER TRANSIT TEODALITE WITH STAND	THEODOLITE PRECISION DIRECT READING VERNIER TRANSIT 20sec: Telescope length 178 mm with focusing screw fitted with eye piece, glass diaphragm with Stadia 1:100, Horizontal Circle 4.5" dia. and Vertical Circle 4" dia. at reading edge. Graduated to read opposite Vernier up to 20 Second, totally enclosed, dust and water proof. Levelling base of 3 foot screws. Centering movement of not less than 25 mm and fitted with Centering device. Fitted with high sensitive bubbles. Kept in wooden box with all the accessories. Folding Aluminium Stand in canvas cover. With erect image having optical plummet arrangement	
6	GHAT TRACER C With pole and target	GHAT TRACER C With pole and target	
7	CLINOMETER	Clinometer compass-3" dia. In leather case.	
8	PLANIMETER	PLANIMETER MECHANICAL 710	
9	BOX SEXTANT	(Pocket). In leather case	
10	HAND LEVEL	HAND LEVEL	
11	PENTAGRAPH	Semi-aluminium, with metal fittings, with castors clamps, perpendicular socket with tracing point, pencil holder and fulcrum pin with scale of proportion, engraved on arm. Packed in well-polished wooden box. Size-36"	
12	TOTAL STATION	3-pin Tribrach, Laser Plummet & Laser Pointer, Trimble Access data collection software on board, 128MB RAM & 1GB Flash Memory, QVGA 16 bit colour, TFT LCD, Touch Screen, Backlit (320x240 pixel) Keyboard & Display on Both Faces with following specs: -	
		Angle : Accuracy : 5 SEC	
		Distance	
		Accuracy (Prism Mode) : + (3mm+2ppm)	
		Accuracy (Direct Reflex Mode) : + (3mm+2ppm)	
		Least Count : 1 mm	
		Distance Range with 1 Prism: 3000 Meters	
		Distance Range without Prism : Upto 300 Meters	
		Includes following: -	
		On Board Side Mount Rechargeable Li-ion Battery (02), (8 hours operation on each battery), Dual slot battery Charger (01), Data cable (01), User Manual on CD (01), Adjustment tools (01), Rain Cover (01), Above in Hard Carrying Transport case (01) Prism – Reflector Tilttable, large – 1 no. Rod - Aluminium Telescopic Rod – 1 no.	
K	FITTING SHOP		



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1	MS Flat	50mm X 5mm	
2	Steel Rule	30cm/12"x25mmx1.0mm	
3	Double end Scriber	Standard.	
4	Centre Punch	150mm	
5	Flat file (Bastard /2nd Cut / Smooth)	300mm	
6	Triangle file (Bastard /2nd Cut / Smooth)	200mm or 250mm	
7	Metal Drill bit Taper shank	15mm	
8	Metal Drill bit Straight shank	12mm	
9	Metal Drill bit Straight shank	5mm	
<b>L</b>	<b>MACHINES LABORATORY</b>		
1	Power Quality Analyzer (MI 2884 EU/ Matrel)	Standard.	
2	M.G Set (Dc Shunt Motor + Dc Shunt Generator)	Standard.	
3	DC Shunt Motor	Standard.	
4	DC Series Motor	Standard.	
5	M.G Set (Dc Series Motor + Dc Series Generator)	Standard.	
6	M.M Set (3-Ø SRIM + DC Shunt Motor)	Standard.	
7	M.G Set (3-Ø Ac Generator + Dc Shunt motor)	Standard.	
8	3 ØAuto Synchronous Motor	Standard.	
9	1 -Ø Induction Motor	Standard.	
10	3 -Ø Auto Synchronous Motor + 3ø Ac Generator	Standard.	
11	3 -Ø Slip Ring Induction Motor	Standard.	
12	3 -Ø Squirrel Cage Induction Motor	Standard.	
13	1- Ø Transformer	Standard.	
14	3 -Ø Transformer	Standard.	
15	Rectifier I/P 440V AC 3-Ø 50Hz, O/P 220V DC, 100A (PowerTronix)	Standard.	
16	Squirrel Cage Induction Motor 2HP	Standard.	
17	DC Shunt Motor 2HP	Standard.	
18	Synchronous Machine Training System Comprising of 2 MG Set includes	Standard.	
i	3-Ø AC Alternator 3HP -2 Nos	Standard.	
ii	AC & DC Measurements Unit Panel	Standard.	



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19	Shunt motor Coupled to Synchronous Machine includes 5Hp DC Shunt Motor & 3 HP Generator	Standard.	
20	Steel rule in English & Metric unit	30cm/12"x25mmx1.0mm	
21	Steel rule in English & Metric unit	60cm/24"x25mmx1.0mm	
22	Outside spring calipper	150cmm Square leg outside caliper	
23	Inside spring calipper	150mm	
24	Cold octagonal chisel flat	25mm x 200mm	
25	Flat file bastard	300mm	
26	Flat file 2nd cut	250mm	
27	Flat file smooth	250mm	
28	Engineer's screw driver, Flat, Philips head, 2-in-1 , with transparent Green & opaque, as mfrs standard.	set of 10 assorted ( 75mm, 100mm, 125mm,150mm, 200mm, 250mm, 300mm) Flat & Philips head)	
29	Combination plier with joint cutter Insulated with thick CA Sleeve. Confirming to IS	150mm	
30	Eye safety glass	transparent	
31	Engineer's Try square	300mmx175mm	
32	Plain round bar, minimum order of one standard length. Small length cutting charge extra Rs.50.00 per cut	25mm dia	
33	Ball pein hammer with handle, generally confirming to IS 841-1983	800gms	
34	Allen hexagonal key Set of 9 (Box Packing)	1.5-10mm	
35	Adjustable spanner	305mm x 35mm opening (Phosphate finish)	
36	Oil can hand lever pressure feed	250ml approx	
37	HSS Tool bit	6mm2	
38	HSS Tool bit	10mm2	
39	Twist drill	3mm-13mm in step of 0.5mm	
40	Big drill chuck with taper shank	Standard.	
41	Knurling cutter Diamond Knurling Tool GV with holder	Diamond shape (advice male or female & size	
42	Surface gauge	12" adjustable	





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43	Engineer's Bench vice for Machinist with DoveTailn Guide ways	<p>Heavy</p> <ul style="list-style-type: none"> <li>- Accurate workmanship plus apex design feature to provide this vice great clamping strength and accuracy.</li> <li>- Rear Jaw Sliding: The design of front jaw being stationary helps the additional muscular strength and never breaks like ordinary design.</li> <li>-Dove Tail Guide Ways: Thus Positive locking to withstand heavy loads.</li> <li>- Nut &amp; Screw: Are held in Jig Bored Holes hence are within the perfect straight line and have no tension spring which provides free motion and does not strain the operator.</li> <li>- Front Mounting: Holes are provided for Table and Mounts the vice with perfect rigidity.</li> <li>- Body is made of special high grade Casting to withstand any Shock load.</li> <li>- Forged Nut: The Nut and the screw has been machined from high tensile steel forging.</li> <li>The Tropi Zodiac Threads are machined on Thread wherling and has the same degree of Angle which give life long performance.</li> <li>- Jaws Hardened &amp; Groung with "v" Grooves :The grip is much more rigid with less torque at handle lever.</li> </ul> <p>Jaw width / Opening / Depth - 150mm / 125mm / 75mm with minimum weight over 30Kg</p>	
44	Heavy wooden working table for bench vice	Standard.	
45	Digital vernier calipper: Model 3747	0-300	
46	Digital vernier calipper	150mm	
47	Digital vernier calipper	200mm	
48	Screw micrometer (Outside micrometer)	<p>Material: Stainless Steel Hard &amp; Cast Iron Casting</p> <p>Least Count: 0.01mm</p> <p>Graduation: Top Side: 0-25 mm Marked</p> <p>Standard: IS:2967 an outside micrometre made of cast steel with a chrome-plated head assembly. The least count is 0.01mm.</p> <p>The External Micrometer is used to check the thickness of any part. It is very useful in workshops, tool rooms and inspection labs. Each micrometre is packed in a plastic case with a master gauge and adjustment spanner. Each Micrometer comes with a Calibration Certificate.</p>	
49	Boring tool bit with holder: Offer Straight Shank Boring Tool Kit	Standard.	
50	Taper gauge	<p>Stainless steel polishes finished . Standard EEC-I, Least count 0.05mm/0.001" , graduation top side 0.4-4mm Marking. Back side 0.01"-0.15".</p> <p>Length 160mm Width 11mm Thickness 5.5mm, rigid type accuracy <math>\pm 0.05\text{mm}</math></p>	
51	Water based coolant for lathe machine	Bolmerol / Equivalent make as available , in standards pack	
52	Hacksaw frame:	12 inch Sqaure MS Pipe with Alluminium die casted handle with 1 blade	
53	Hacksaw frame Pistol Grip Black powder coated Bow with plastic blue handle,	Size: 6"	



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	nickel plated pairs with blade fitted .		
54	Factory gloves	Leather / Rupper / Jean/Cotton	
55	Angle grinder machine	GWS 600 model	
<b>M</b>	<b>CONCRETE LABORATORY</b>		
1	AIM-394	Vicat Apparatus with ISI Certification Mark, IS:5513, fitted in Aluminium Box	
2	AIM-390	Air Permeability Apparatus (Blaine type) with ISI Certification mark 15;5516, fitted in Aluminium Box	
3	AIM 400	Le-Chat elier Mould, with ISI Certification Mark IS:5514, each	
4	AIM 401	Le-Chat elier Flask	
5	AIM 314E-DG-1	Digital Compression Testing Machine, Capacity 1000kN	
6	AIM-337	Compaction Factor Apparatus	
7	AIM 334	Slump Test Apparatus with testing rod and base plate	
8	AIM-335	IAIMIL Consistometer	
9	AIM-332	100kN Flexure Testing Machine Electrically Operated	
10	AIM-455	Crushing Value Apparatus	
11	AIM-9107	Laboratory Electric Oven, with Digital Indicator Cum Controller with Safety Alarm, range 50° to 250°C +/-1°C with Air Circulating Fan, S.S. Inside Size 450 x 600 x 450mm	
12	AIM-453	Density Basket	
13	AIM-046	Pycnometer	
14	AIM-054-1	Sieve Shaker, Motorised, with Built-in Digital Timer	
15	AIM-05401	Adapter for 30cm dia sieves	
16	AIM-05107	Sieve G.I. Frame 45cm dia x 63mm	
17	AIM-05108	Sieve G.I. Frame 45cm dia x 53mm	
18	AIM-05110	Sieve G.I. Frame 45cm dia x 45mm	
19	AIM-05112	Sieve G.I. Frame 45cm dia x 37.5mm	
20	AIM-05117	Sieve G.I. Frame 45cm dia x 20mm	
21	AIM-05119	Sieve G.I. Frame 45cm dia x 16mm	
22	AIM-05139	Sieve G.I. Frame 45cm dia x 14mm	
23	AIM-05123	Sieve G.I. Frame 45cm dia x 10mm	
24	AIM-05126	Sieve G.I. Frame 45cm dia x 8mm	
25	AIM-05128	Sieve G.I. Frame 45cm dia x 6.3mm	
26	AIM-05136	Sieve G.I. Frame 45cm dia x 6.0mm	
27	AIM -05129	Sieve G.I. Frame 45cm dia x 5.0m m	
28	AIM-05130	Sieve G.I. Frame 45cm dia x 4.75mm	
29	AIM-05138	Sieve G.I. Frame 45cm dia x 4mm	
30	AIM-05131	Sieve G.I. Frame 45cm dia x 2.8mm	
31	AIM-05137	Sieve G.I. Frame 45cm dia x 2.0mm	
32	AIM-05150	Pan and Cover for 45cm dia sieves	
33	AIM-05227	Sieve G.I. Frame 30cm dia x 125mm	
34	AIM-05202	Sieve G.I. Frame 30cm dia x 75mm	
35	AIM-05203	Sieve G.I. Frame 30cm dia x 63mm	
36	AIM-05204	Sieve G.I. Frame 30cm dia x 53mm	
37	AIM-05206	Sieve G.I. Frame 30cm dia x 45mm	
38	AIM-05208	Sieve G.I. Frame 30cm dia x 37.5mm	
39	AIM-05211	Sieve G.I. Frame 30cm dia x 25mm	
40	AIM-05235	Sieve G.I. Frame 30cm dia x 14mm	
41	AIM-05217	Sieve G.I. Frame 30cm dia x 12.5mm	
42	AIM-05219	Sieve G.I. Frame 30cm dia x 10mm	



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43	AIM-05221	Sieve G.I. Frame 30cm dia x 8mm	
44	AIM-05222	Sieve G.I. Frame 30cm dia x 6.3m m	
45	AIM-05236	Sieve G.I. Frame 30cm dia x 6mm	
46	AIM-05224	Sieve G.I. Frame 30cm dia x 4.75mm	
47	AIM-05233	Sieve G.I. Frame 30cm dia x 2.80m m	
48	AIM-05237	Sieve G.I. Frame 30cm dia x 2.0mm	
49	AIM-05250	Pan and Cover for 30cm dia sieves	
50	AIM -05337	Sieve Brass Frame 20cm dia x 10mm	
51	AIM -05302	Sieve Brass Frame 20cm dia x 4.75mm	
52	AIM -05306	Sieve Brass Frame 20cm dia x 2.36mm	
53	AIM -05307	Sieve Brass Frame 20cm dia x 2.00mm	
54	AIM -05309	Sieve Brass Frame 20cm dia x 1.40mm	
55	AIM -05310	Sieve Brass Frame 20cm dia x 1.18mm	
56	AIM -05311	Sieve Brass Frame 20cm dia x 1.00mm	
57	AIM -05312	Sieve Brass Frame 20cm dia x 850 microns	
58	AIM -05314	Sieve Brass Frame 20cm dia x 600 microns	
59	AIM -05315	Sieve Brass Frame 20cm dia x 500 microns	
60	AIM -05317	Sieve Brass Frame 20cm dia x 355 microns	
61	AIM -05319	Sieve Brass Frame 20cm dia x 250 microns	
62	AIM -05339	Sieve Brass Frame 20cm dia x 160 microns	
63	AIM -05322	Sieve Brass Frame 20cm dia x 150 microns	
64	AIM -05323	Sieve Brass Frame 20cm dia x 125 microns	
65	AIM -05326	Sieve Brass Frame 20cm dia x 75 microns	
66	AIM -05327	Sieve Brass Frame 20cm dia x 63 microns	
67	AIM -05328	Sieve Brass Frame 20cm dia x 53 microns	
68	AIM -05329	Sieve Brass Frame 20cm dia x 45 microns	
69	AIM -05350	Pan and Cover for 20cm dia sieves	
70	AIM -460	Tile Flexure Testing Machine	
71	AIM -481	Tile Abrasion Testing Machine	
72	AIM-48101	Thickness Measuring Device, with Dial Gauge, having 25mm travel and 0.01mm least count	
73	AIM-48103	Abrasive Powder	
74	AIM-408-2	Cement Autoclave, Analog with Pressure Gauge & Digital	
75	AIM -374-1-DG	Length Comparator Digital	
76	AIM -403	Shrinkage Bar Mould, two compartments with smooth reference point	
77	AIM -340	Air Entrainment Meter Capacity 0.005m <sup>3</sup> (5 litres) suitable for aggregate size upto 38mm	
78	AIM -338	Concrete Penetrometer, Spring Type	
79	AIM -336	Flow Table, Motorised	
80	AIM-372-DG	Longitudinal Compressometer, Digital	
81	AIM 373-DG	Lateral Extensometer, Digital	
N	<b>SOIL TESTING LABORATORY</b>		
1	AIM 031	Hand Operated Extractor 38mm mm dia specimen	
2	AIM-036-1	Speedy Moisture Meter, Range 0-25% (Gauge Div.:0.5%) with digital weighing balance	
3	AIM-037-1	Speedy Moisture Meter, Range 0-50% (Gauge Div.:1%) with digital weighing balance	
4	AIM-040	Liquid Limit Device, motorised, with Casagrande grooving tools and gauge block (suitable for operation on 50 Hz, single phase AC Supply)	
5	AIM-041	Liquid Limit Device, Hand Operated, with Casagrande grooving tools and gauge block.	
6	AIM-9831-1	Plastic Limit set comprising of glass plate, Brass rod, Spatula, Moisture Tin & Porcelain Dish.	



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7	AIM 042-3	Universal Penetrometer, Digital Type New Type for Soil and Bitumen testing	
8	AIM-045	Shrinkage Limit Set	
9	AIM-046	Pycnometer	
10	AIM - 05101	Sieve G.I. Frame 45cm dia x 125mm	
11	AIM - 05106	Sieve G.I. Frame 45cm dia x 75mm	
12	AIM - 05107	Sieve G.I. Frame 45cm dia x 63mm	
13	AIM - 05108	Sieve G.I. Frame 45cm dia x 53mm	
14	AIM - 05110	Sieve G.I. Frame 45cm dia x 45mm	
15	AIM - 05112	Sieve G.I. Frame 45cm dia x 37.5mm	
16	AIM - 05115	Sieve G.I. Frame 45cm dia x 25mm	
17	AIM - 05121	Sieve G.I. Frame 45cm dia x 12.5mm	
18	AIM-05124	Sieve G.I. Frame 45cm dia x 9.5mm	
19	AIM-05128	Sieve G.I. Frame 45cm dia x 6.3mm	
20	AIM-05136	Sieve G.I. Frame 45cm dia x 6.0mm	
21	AIM-05130	Sieve G.I. Frame 45cm dia x 4.75mm	
22	AIM-05138	Sieve G.I. Frame 45cm dia x 4mm	
23	AIM-05134	Sieve G.I. Frame 45cm dia x 3.35mm	
24	AIM-05150	Pan and Cover for 45cm dia sieves	
25	AIM-05227	Sieve G.I. Frame 30cm dia x 125mm	
26	AIM-05202	Sieve G.I. Frame 30cm dia x 75mm	
27	AIM-05203	Sieve G.I. Frame 30cm dia x 63mm	
28	AIM-05204	Sieve G.I. Frame 30cm dia x 53mm	
29	AIM-05205	Sieve G.I. Frame 30cm dia x 50mm	
30	AIM-05206	Sieve G.I. Frame 30cm dia x 45mm	
31	AIM-05211	Sieve G.I. Frame 30cm dia x 25mm	
32	AIM-05213	Sieve G.I. Frame 30cm dia x 20mm	
33	AIM-05214	Sieve G.I. Frame 30cm dia x 19mm	
34	AIM-05219	Sieve G.I. Frame 30cm dia x 10mm	
35	AIM-05222	Sieve G.I. Frame 30cm dia x 6.3mm	
36	AIM-05224	Sieve G.I. Frame 30cm dia x 4.75mm	
37	AIM-05242	Sieve G.I. Frame 30cm dia x 4.00mm	
38	AIM-05226	Sieve G.I. Frame 30cm dia x 3.35mm	
39	AIM-05250	Pan and Cover for 30cm dia sieves	
40	AIM-05337	Sieve Brass Frame 20cm dia x 10mm	
41	AIM-05302	Sieve Brass Frame 20cm dia x 4.75mm	
42	AIM-05303	Sieve Brass Frame 20cm dia x 4mm	
43	AIM-05304	Sieve Brass Frame 20cm dia x 3.35mm	
44	AIM-05312	Sieve Brass Frame 20cm dia x 850 microns	
45	AIM-05317	Sieve Brass Frame 20cm dia x 355 microns	
46	AIM-05318	Sieve Brass Frame 20cm dia x 300 microns	
47	AIM-05319	Sieve Brass Frame 20cm dia x 250 microns	
48	AIM-05326	Sieve Brass Frame 20cm dia x 75 microns	
49	AIM-05327	Sieve Brass Frame 20cm dia x 63 microns	
50	AIM-05328	Sieve Brass Frame 20cm dia x 53 microns	
51	AIM-05329	Sieve Brass Frame 20cm dia x 45 microns	
52	AIM-05350	Pan and Cover for 20cm dia sieves	
53	AIM-054-1	Sieve Shaker, Motorised, with Built-in Digital Timer	
54	AIM-05401	Adapter for 30cm dia sieves	
55	AIM-074-1	Unconfined Compression Tester for load measurement, supplied with AIM 062-1 Load Frame 3 speed 50 kN, AIM 264 Proving Ring, 2kN and AIM 072 Dial Gauge, 0.01x25mm & AIM 07401 Plain Platen with adaptor, AIM 03105 Split Mould and AIM 07506 Rubber Sheath	
56	AIM-095-1	Triaxial Test Apparatus, Analog, with AIM 064, AIM 075-38, AIM 265, AIM 081-1-2, AIM 077 and AIM 072, AIM 079	





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57	AIM-079	Lateral Pressure Assembly capacity 10kg/cm <sup>2</sup> (Pressure Chamber with foot pump)	
58	AIM-104	Direct Shear Test Apparatus 2 kN capacity	
59	AIM 108-1	Laboratory Vane Shear Apparatus, Motorised	
60	AIM-110-MS	Compaction Test Apparatus, Manual -Light Compaction made of Mild Steel	
61	AIM-111-MS	Compaction Test Apparatus, Manual-Heavy Compaction made of Mild Steel	
62	AIM-114-1	Universal Automatic Compactor with Mild Steel compaction mould as per IS, supplied with AIM 11001-MS & AIM 111001-MS	
63	AIM-115-1	Relative Density Apparatus	
64	AIM-120	Laboratory California Bearing Ratio Test Apparatus, Motorised, Three Speed	
65	AIM-131	Laboratory Permeability Apparatus	
66	AIM-11002	Rammer 2.6kg x 310mm controlled drop.	
67	AIM-11102	Rammer 4.9kg x 450mm controlled drop.	
68	AIM-133	Standard Penetration Test (SPT) Set consisting of AIM 016 Split Spoon Sampler, AIM 019-1 Drive Weight, AIM 021 Guide Pipe Assembly, AIM 022 Tripod, AIM 02404 with AIM 13301 Rope 19mm dia x 10 mt length	
69	AIM-02402	'A' Drill Rod, 1m long complete with adaptor	
70	AIM-134	Dynamic Cone Penetration Test Apparatus (DCPT)	
71	AIM-02402	A' Type Drill Rods 1mt with adaptor	
72	AIM-15716	Grooved M.S. Plate, 45cm x 45cm dia square x 25mm thick	
73	AIM-15717	Grooved M.S. Plate, 60cm x 60cm dia square x 25mm thick	
74	AIM-15718	Grooved M.S. Plate, 75cm x 75cm dia square x 25mm thick	
75	AIM-161	Core Cutter	
76	AIM-162	Sand Pouring Cylinder Apparatus, 100mm Dia	
77	AIM-162-1	Sand Pouring Cylinder Apparatus, large	
78	AIM-9108	Laboratory Electric Oven, with Digital Indicator Cum Controller with Safety Alarm, range 50° to 250°C +/-1 °C with Air Circulating Fan, S.S. Inside Size 600 x 600 x 600mm	
<b>O</b>	<b>MATERIAL TESTING LABORATORY</b>		
1	AIM 317E-DG-1	Digital Compression Testing Machine, Capacity 2000kN	
2	AIM-33204	Flexure Test Attachment, 100 kN capacity for Digital CTM	
3	AIM 334	Slump Test Apparatus with testing rod and base plate	
4	AIM-337	Compaction Factor Apparatus	
5	AIM-339	Bulk Density Measures, 10 and 20 Ltrs	
6	AIM-340	Air Entrainment Meter Capacity 0.005m <sup>3</sup> (5 litres) suitable for aggregate size upto 38mm	
7	AIM 344	Mould, Cast Iron, for 150mm Cube with ISI Certification	
8	AIM-347	Beam Mould, 150mm x 150mm x 700mm	
9	AIM-348	Tamping Bar, Steel 25mm x 25mm as per ISI Certification	
10	AIM 349	Cylindrical Mould, Cast Iron, Split Lengthwise 150mm dia x	
11	AIM 364	Vibrating Table, 75 x 75cm for 6 moulds of 150mm cube	
12	AIM 373-DG	Lateral Extensometer, Digital	
13	AIM-388	Concrete test Hammer with NCCBM Calibrated	
14	AIM-390	Air Permeability Apparatus (Blaine type) with ISI Certification mark 15;5516, fitted in Aluminium Box	



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15	AIM 400	Le-Chatelier Mould, with ISi Certification MarkIS:5514, each	
16	AIM-418-2	Vibration Machine, with built-in Digital Timer, NABL	
17	AIM 414	Mould, Steel, for 70.6mm cube	
18	AIM-434-1	Cement Tensile Testing Machine	
19	AIM-424	Briquette mould, single gang with steel base plate	
20	AIM-426	Briquette mould, three gang with steel base plate	
21	AIM-664	Fatigue Testing Machine 200kg	
22	AIM-665	Impact Testing Machine	
23	AIM-670	Torsion Testing Machine	
<b>P</b>	<b>HYDRAULIC LABORATORY</b>		
1	AIM-HY1	Flow Apparatus	
2	AIM-HY2	Venturimeter & Orificemeter	
3	AIM-HY3	Orifice & Mouth piece	
4	AIM-HY4	Pitot Tube	
5	AIM-HY5	Reynold's Apparatus	
6	AIM-HY6	Notches (V & Rectangular type}	
7	AIM-HY7	Metacentric Height Apparatus	
8	AIM-HY8	Bernouli's Theorem Apparatus	
9	AIM-HY9	Losses Determination Apparatus	
10	AIM-HY11	Kaplan Turbine	
11	AIM-HY12	Pelton Turbine	
12	AIM-HY13	Centrifugal Pump	
13	AIM-HY14	Reciprocating Pump	
14	AIM-HY15	Jet Pump	
15	AIM-HY16	Gear Pump	
16	AIM-HY17	Submersible Pump	
<b>Q</b>	<b>HIGHWAY LABORATORY</b>		
1	AIM-9933	Buoyancy Balance	
2	AIM-339	Bulk Density	
3	AIM-455	Crushing Value Apparatus	
4	AIM-456	Aggregate Impact Tester	
5	AIM-457	Deval Abrasion Tester	
6	AIM-458-1	Los Angeles Abrasion testing machine with Counter	
7	AIM-48103	Abrasive Powder	
8	AIM-511	Flash Point (Open) and Fire Point, Pensky-Martens	
9	AIM-50810	Thermometer IP 15C Range 5°C to +110°C	
10	AIM-512-1	Universal Penetrometer	
11	AIM 515	Penetration Cone	
12	AIM-518	Bitumen Penetration Kit	
13	AIM-52610	Thermometer IP 8C, Range 0° C to 45° C	
14	AIM-52611	Thermometer IP 9C, Range 40° C to 85° C	
15	AIM-561-2	Ring and Ball Apparatus, Semi Automatic	
16	AIM-56110	Thermometer IP 60C	
17	AIM-56301	Filter Paper Discs, Set of 25 numbers	
18	AIM-565-1	Ductility Testing Machine with Digital Temp Indicator	
19	AIM-566-3-AN	Benkelman Beam with Analog Dial Gauge in Wooden	
<b>R</b>	<b>MICROPROCESSOR AND MICROCONTROLLER LABORATORY</b>		
1	Microprocessor Trainer Kit 8085	Standard.	
2	Stepper motor	Standard.	



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3	Stepper motor controller (Card)	Standard.	
4	Microcontroller Trainer Kit 89C51	Standard.	
5	DAC Interfacing Module	Standard.	
6	Micro controller flash programmer	Standard.	
7	Microcontroller - LED Interface Module	Standard.	
<b>S</b>	<b>BASIC ELECTRONICS LABORATORY</b>		
1	Digital storage oscilloscope :-DSO-025C2 -25M Hz	Standard.	
2	Cathode Ray Oscilloscope EZ 20 MHZ	Standard.	
3	Function generator (3MHz)	Standard.	
4	DC Regulated power supply:- (Multi output) 0-30V, 2A	Standard.	
5	Function generator (5MHz)	Standard.	
6	Rheostat-1K $\Omega$ , 1/2A [Stead]	Standard.	
<b>T</b>	<b>BASIC ELECTRICAL LABORATORY</b>		
1	Electrical Safety Trainer	Standard.	
2	Electrical Wiring Training System	Standard.	
3	Insulation Megger	Standard.	
4	DP Switch Fuse Unit 16 A, 240 V	Standard.	
5	Multimeter analog	Standard.	
6	Multimeter digital	Standard.	
7	Soldering Iron, 65W	Standard.	
8	Repairing of Switchboard	Power line & Lighting Socket	
9	Auto-Transformer	Single Phase: 230V, 15A	
10	Auto-Transformer	3-Phase: 415V, 15A	
11	Rheostat	5A, 25 $\Omega$	
12	Rheostat	1.7A, 200 $\Omega$	
13	Inductor	0.4 H, 250V	
14	Capacitor	120-150 Mf, 230V	
15	AC Ammeter	0-2 A	
16	AC Ammeter	0-5 A	
17	AC Ammeter	0-10 A	
18	DC Ammeter	0-2 A	
19	DC Ammeter	0-5 A	
20	DC Ammeter	0-10 A	
21	DC Ammeter	0-20 A	
22	Digital Multimeter	Hand Held True RMS	
23	Wattmeter	Multi Voltage Range 5A	



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24	Wattmeter	2A	
25	Wire	1.5 sqmm	
26	Wire	2.5 sqmm	
27	Transformer	Step up 1kVA, 230V	
28	Transformer	Step Down 1kVA	
29	Flourescence	230V, 5A	
30	Frame	Standard.	
31	Tube Choke	230V, 5A	
32	Starter	Standard.	
33	Oscilloscope LCD	Oscilloscope	
34	Digital Storage Oscilloscope	Digital Storage Oscilloscope	
35	Clamp-on Meter	3 5 /6 Dgt. 6000 Counts 1000AAC/DC Trms Clampmeter	
36	DC Regulated Power Supply	Standard.	
37	KVL	All in one Trainer Boards or Individual Trainer Board (Whichever is Available)	
38	KCL	Standard.	
39	Thevenin's	Standard.	
40	Norton's	Standard.	
41	Ohm's Law	Standard.	
42	Maximum Power Transfer	Standard.	
<b>U</b>	<b>CONTROL AND SIMULATION LABORATORY</b>		
1	Synchro Transmitter Receiver Pair	Standard.	
2	Linear Variable Differential Transformer (LVDT)	Standard.	
3	MATLAB	Standard.	
4	PSPICE	Standard.	
<b>V</b>	<b>MEASUREMENT LABORATORY</b>		
1	Digital handheld Lux	Standard.	
2	Flux Meter	Standard.	
3	Decade Capacitor box	Standard.	
4	Bridge Wheatstone	Standard.	
5	Current transformer	Standard.	
6	Potential Transformer	AIM 317E-DG1	
7	Magnetic Standard	Standard.	
8	Phase shifting Transformer	Standard.	
9	Potentiometer Crompton	Standard.	
10	Potentiometer Slide wire	Standard.	
11	Infrared Thermometer	Standard.	
12	Ordinary Thermometer	Standard.	
13	Cathode ray Oscilloscope	Standard.	
14	DC Regulated Power supply	Standard.	
15	Single Phase Energy Meter	Standard.	
16	Electric Heater	Standard.	





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17	Inductance Meter	Standard.	
18	Standard Solenoid	Standard.	
19	Conductor Clamp	Standard.	
20	Three Phase & Single Phase Auto Transformers	Standard.	
21	Three Phase & Single Phase Wattmeters	Standard.	
W	<b>POWER ELECTRONIC LABORATORY</b>		
1	Single phase SCR bridge converter with R, RL load	Standard.	
2	TRIAC Characteristics model, PE-04	Standard.	
3	MOSFET Characteristics model, PE-02	Standard.	
4	SCR Parallel Inverter module, MODEL-PEC14M7	Standard.	
5	Commutation Circuit Module (Chopper) MODEL-14M14CH# 2	Standard.	
6	Fixed D.C. Power Supply Model-PD-01	Standard.	
7	Function generator	Standard.	
8	DC regulated power supply (multi output) 0-30 V, +/-5V, +/-12V-	Standard.	

IV. IT EQUIPMENT

Sl.no	IT Equipment	Specifications	Detailed Specifications
A	COMPUTER SYSTEM		
1	Laptop 1	Processor	13th Gen, Intel® Core™ i3-1315U Processor 1.2 GHz (10MB Cache, up to 4.5 GHz, 6 cores, 8 Threads)
		Operating System	Windows 11 Home
		Microsoft Office	Microsoft 365 Basic with 100GB Cloud Storage for 1 Year + Office Home 2024 with lifetime validity
		Display	39.62 cms (15.6) FHD (1920 x 1080) display having 16:9 Aspect Ratio    60Hz Refresh rate    250nits Brightness
		Graphics Card	Intel® UHD Graphics
		Integrated GPU	Intel® UHD Graphics
		Memory	16GB DDR4 RAM (8GB DDR4 on board + 8GB DDR4 SO-DIMM) expandable upto 24GB using 1x DDR4 SO-DIMM slot
		Storage	512GB M.2 NVMe™ PCIe® 4.0 SSD
		Wifi	Wi-Fi 6E(802.11ax) (Dual band) 1*1
		Weight [ KG ]	1.7
		Panel	FHD (1920 x 1080)
		Touchpad	Precision touchpad
		Bluetooth	Bluetooth® 5.3 Wireless Card
		Hdmi	HDMI 1.4



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		Web camera	720p HD camera    With privacy shutter
		Battery	42WHrs, 3S1P, 3-cell Li-ion
		Keyboard	Backlit Chiclet Keyboard
		Audio Technology / Speakers	Built-in speaker    Built-in array microphone
		I/O Ports	1x USB 2.0 Type-A (data speed up to 480Mbps)    1x USB 3.2 Gen 1 Type-C (data speed up to 5Gbps)    2x USB 3.2 Gen 1 Type-A (data speed up to 5Gbps)    1x HDMI 1.4    1x 3.5mm Combo Audio Jack    1x DC-in
		Security	McAfee®    BIOS Booting User Password Protection    BIOS setup user password    Trusted Platform Module (Firmware TPM)
		Antivirus	McAfee® 1 year
		Power	ø4.5, 45W AC Adapter, Output: 19V DC, 2.37A, 45W, Input: 100~240V AC 50/60Hz universal
		Color gamut	45% NTSC color gamut
		Glare	Anti-glare display
		TÜV Rheinland-certified	TÜV Rheinland-certified
		Screen-to-body ratio	84%
		Military Grade	US MIL-STD 810H military-grade standard
		Expansion Slots	1x DDR4 SO-DIMM slot    1x M.2 2280 PCIe 4.0x4
		Ecolabels & Compliances	EPEAT Silver    Energy star 8.0    RoHS    REACH
		Customer Care Details	Toll free + service centre
		Warranty	1 Year on-site warranty
2	Laptop 2	Processor	Intel® Core™ 5 Processor 120U 1.4 GHz (12MB Cache, up to 5.0 GHz, 10 cores, 12 Threads)
		Operating System	Windows 11
		Microsoft Office	Microsoft 365 Basic with 100GB Cloud Storage for 1 Year + Office Home 2024 with lifetime validity
		Display	39.62 cms (15.6) FHD (1920 x 1080) display having 16:09 Aspect Ratio    60Hz Refresh rate    250nits Brightness
		Graphics Card	Intel® Graphics
		Integrated GPU	Intel® Graphics
		Memory	8GB DDR4 on board RAM expandable upto 24GB using 1x DDR4 SO-DIMM slot
		Storage	512GB M.2 NVMe™ PCIe® 4.0 SSD
		Wifi	Wi-Fi 6(802.11ax) (Dual band) 1*1
		Weight	1.7
		Panel	FHD (1920 x 1080)
		Fingerprint Sensor	Fingerprint sensor integrated with Touchpad
		Touchpad	Precision touchpad
		Bluetooth	Bluetooth® 5.2 Wireless Card
		Hdmi	1x HDMI 1.4
		Web camera	720p HD camera    With privacy shutter
		Battery	42WHrs, 3S1P, 3-cell Li-ion
		Keyboard	Backlit Chiclet Keyboard
		Audio Technology / Speakers	Built-in speaker    Built-in array microphone
		I/O Ports	1x USB 2.0 Type-A (data speed up to 480Mbps)    1x USB 3.2 Gen 1 Type-C (data speed up to 5Gbps)    2x USB 3.2 Gen 1 Type-A (data speed up to 5Gbps)    1x 3.5mm Combo Audio Jack    1x DC-in
		Security	Fingerprint sensor integrated with Touchpad    McAfee®    BIOS Booting User Password Protection    Trusted Platform Module (Firmware TPM)



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		Antivirus	McAfee® 1 year pre loaded
		Power	ø4.5, 45W AC Adapter, Output: 19V DC, 2.37A, 45W, Input: 100~240V AC 50/60Hz universal
		Color gamut	45% NTSC color gamut
		Glare	Anti-glare display
		TÜV Rheinland-certified	TÜV Rheinland-certified
		Screen-to-body ratio	84%
		Military Grade	US MIL-STD 810H military-grade standard
		Expansion Slots	1x DDR4 SO-DIMM slot    1x M.2 2280 PCIe 4.0x4
		Customer Care Details	Toll free + service centre
		Warranty	1 Year on-site warranty
3	Laptop 3	Processor	Intel® Core™ Ultra 9 Processor 275HX 2.7 GHz (36MB Cache, up to 5.4 GHz, 24 cores, 24 Threads)    Intel® AI Boost NPU up to 13TOPS
		Neural Processor	Intel® AI Boost NPU up to 13TOPS
		Operating System	Windows 11 Home
		Microsoft Office	Microsoft 365 Basic with 100GB Cloud Storage for 1 Year + Office Home 2024 with lifetime validity
		Display	40.64 cms (16) 2.5K (2560 x 1600, WQXGA) IPS-level ROG Nebula Display having 16:10 Aspect Ratio    3ms Response Time (G2G)    240Hz Refresh Rate    500nits Brightness
		Graphics Card	12GB GDDR7 NVIDIA® GeForce RTX™ 5070 Ti Laptop GPU ROG Boost: 1565MHz* at 140W (1515MHz Boost Clock+50MHz OC, 115W+25W Dynamic Boost)    MUX Switch + NVIDIA® Advanced Optimus
		Integrated GPU	Intel® UHD Graphics
		Memory	32GB DDR5-5600 MHz SO-DIMM RAM expandable upto 64GB using 2x SO-DIMM slots    Support dual channel memory technology (The memory speed of the systems vary by CPU SPEC)
		Storage	1TB PCIe® 4.0 NVMe™ M.2 SSD
		Wifi	Wi-Fi 7(802.11be) (Triple band) 2*2
		Weight [ KG ]	2.65
		Panel	2.5K (2560 x 1600, WQXGA)
		LAN	10/100/1000/2500 Mbps
		Bluetooth	Bluetooth® 5.4 Wireless Card
		Hdmi	1x HDMI 2.1 FRL
		Web camera	1080P FHD IR Camera for Windows Hello
		Battery	90WHrs, 4S1P, 4-cell Li-ion
		Keyboard	Backlit Chiclet Keyboard 4-Zone RGB    With Copilot key
		Audio Technology / Speakers	2-speaker system with Smart Amplifier Technology    AI noise-canceling technology    Dolby Atmos    Hi-Res certification (for headphone)    Smart Amp Technology
		I/O Ports	1x 2.5G LAN port    2x Thunderbolt™ 5 with support for DisplayPort™ / power delivery / G-SYNC (data speed up to 120Gbps)    3x USB 3.2 Gen 2 Type-A (data speed up to 10Gbps)
		Security	BIOS Administrator Password and User Password Protection    Trusted Platform Module (Firmware TPM)
		Antivirus	McAfee® 1 year
		Power	Rectangle Conn, 280W AC Adapter, Output: 20V DC, 14A, 280W, Input: 100-240V AC, 50/60Hz universal
		Glare	Anti-glare display
		ADOBE	75.35%



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		Glare	Anti-glare display
		Adaptive-Sync technology	G-Sync
		Contrast Ratio	1200:01:00
		Viewing Angle	170.00
		DCI P3 %	100%
		Adaptive-Sync Technology	G-Sync
		Thermal Feature	Tri Fan Technology   Sandwiched Heatsink design    End to End Vapor Chamber
		Military Grade	US MIL-STD 810H military-grade standard
		Expansion Slots	2x SO-DIMM slots
		Customer Care Details	Toll free + service centre
		Warranty	1 Year on-site warranty
4	Desktop 1	Processor	Intel® Core™ i5-14400 Processor 2.5GHz (20MB Cache, up to 4.7GHz, 10 cores, 16 Threads)
		Operating System	Windows 11 Home
		Microsoft Office	Microsoft 365 Basic with 100GB Cloud Storage for 1 Year + Office Home 2024 with lifetime validity
		Graphics Card	Intel® UHD Graphics 730
		Integrated GPU	Intel® UHD Graphics 730
		Memory	8GB DDR5 U-DIMM RAM expandable upto 32GB using 2x DDR5 U-DIMM slot(s) (Memory speed is 5600MHz, but run at 4000~4400MHz.)
		Storage	512GB M.2 2280 NVMe™ PCIe® 4.0 SSD
		Wifi	Wi-Fi 6E(802.11ax) (Dual band) 2*2
		Weight [ KG ]	5
		Size	8.6L
		LAN	Intel WGI219V 10/100/1000 Mbps, non-vPro
		Bluetooth	Bluetooth® 5.3 Wireless Card
		Hdmi	1x HDMI 1.4
		Sata Port	2 x SATA 6.0Gb/s ports
		Thermal CPU Cooling Module	Air Cooler
		Expansion Slot	1x PCIe® 4.0 x 16 (operating at PCIe® 4.0 x8), 1x M.z connector for WiFi, 2x M.2 2280 connector for storage, zx PPR5 S0-PIMM slot
		Keyboard	Wired keyboard (USB)    Wired optical mouse (USB)
		Audio Technology / Speakers	High Definition 7.1 Channel Audio
		Front I/O Ports	1x Headphone    1x Mic in    2x USB 2.0 Type-A    2x USB 3.2 Gen 2 Type-
		Rear I/O Ports	1x Headphone out    1x Line-in    1x MIC in    1x RJ45 Gigabit Ethernet    1x HDMI 1.4    1x VGA Port    2x USB 2.0 Type-A    2x USB 3.2 Gen 1 Type-A
		Security	Kensington Security Slot™(7x 3mm)    Padlock loop    Trusted Platform Module (Firmware TPM)
		Power	330W power supply (80+ Platinum, peak 660W)
		Ecolabels & Compliances	EPEAT Silver    Energy star 8.0    REACH    RoHS
		Expansion Slot	1x PCIe® 4.0 x 16    2x PCIe® 3.0 x 1    1x M.2 2230 connector for storage    1x M.2 2280 connector for storage    1x M.2 connector for WiFi    2x DDR5 U-DIMM slot
		Customer Care Details	Toll free + service centre
		Warranty	1 Year on-site warranty
		Monitor	





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		Display	Panel Size(inch): 21.45
			Aspect Ratio:16:9
			Display Viewing Area (H x V): 478.656 x 260.28 mm
			Display Surface: Non-Glare
			Backlight Type:LED
			Panel Type: IPS
			Viewing Angle (CR≥10, H/V): 178°/ 178°
			Resolution: 1920x1080
			Brightness (Typ.):250cd/m <sup>2</sup>
			Contrast Ratio (Typ.):1300:1
			Display Colors:16.7M
			Response Time:1ms MPRT
			Refresh Rate (Max):100Hz
			Flicker-free:Yes
		Features	Trace Free Technology:Yes
			Color Temp. Selection:Yes(4 modes)
			QuickFit:Yes
			HDCP: Yes
			Low Blue Light:Yes
		I/O Ports	HDMI(v1.4):x 1
			D-Sub:x 1
			Earphone Jack:Yes
		Power Consumption	Power Consumption*:<12W
			Power Saving Mode:0.5 W
			Power Off Mode:<0.3W
			Voltage:100-240V, 50/60Hz
		Mechanical Design	Built-in Power
			Tilt:Yes (+23° ~ -5°)
		Dimensions (Esti.)	VESA Wall Mounting:100x100mm
			Phys. Dimension with Stand (W x H x D) : 493.6 x 357.6 x 204.4 mm
			Phys. Dimension without Stand (W x H x D) : 493.6 x 291.2 x 49.7 mm
			Box Dimension (W x H x D): 555 x 390 x 130 mm
		Certificate	TÜV Flicker-free
			TÜV Low Blue Light
5	Desktop 2	Processor	Intel® Core™ i3-1315U Processor 1.2 GHz (10MB Cache, up to 4.5 GHz, 6 cores, 8 Threads)
		Operating System	Windows 11 Home
		Microsoft Office Display	Ms Office Home 2021
		Graphics Card	Intel® UHD Graphics
		Integrated GPU	Intel® UHD Graphics
		Memory	8GB DDR5 SO-DIMM RAM expandable upto 64GB using 2x DDR5 SO-DIMM slot(s) (Memory speed is 5600MHz, but run at 4800~5200MHz)
		Storage	512GB M.2 2280 NVMe™ PCIe® 4.0 SSD
		Wifi	Wi-Fi 6(802.11ax) (Dual band) 2*2
		Weight [ KG ]	6
		Size	15L
		Panel	
		LAN	Intel WGI219V 10/100/1000 Mbps, non-vPro
		Bluetooth	Bluetooth® 5.4 Wireless Card
		Hdmi	1x HDMI 1.4
		Sata Port	2 x SATA 6.0Gb/s ports



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		Thermal CPU Cooling Module	Air Cooler
		Keyboard	Wired keyboard (USB)    Wired optical mouse (USB)
		Audio Technology / Speakers	High Definition 7.1 Channel Audio
		Front I/O Ports	1x Headphone    1x USB 3.2 Gen 1 Type-C    2x USB 3.2 Gen 1 Type-A    1x 3.5mm combo audio jack    1x USB 3.2 Gen 1 Type-C    2x USB 3.2 Gen 1 Type-A
		Rear I/O Ports	1x RJ45 Gigabit Ethernet    1x HDMI 1.4    1x Displayport 1.4    1x 7.1 channel audio (3 ports)    1x Kensington lock    4x USB 2.0 Type-A
		Security	HDD User Password Protection and Security    Kensington Security Slot™(7x 3mm)
		Power	180W power supply (80+ Bronze, peak 228W)
		Ecolabels & Compliances	EPEAT Silver    Energy star 8.0    REACH    RoHS
		Expansion Slot	1x M.2 connector for WiFi    2x M.2 2280 connector for storage    2x DDR5 SO-DIMM slot
		Customer Care Details	Toll free + service centre
		Warranty	1 Year on-site warranty
		Monitor	
		Display	Panel Size(inch): 21.45
			Aspect Ratio:16:9
			Display Viewing Area (H x V): 478.656 x 260.28 mm
			Display Surface: Non-Glare
			Backlight Type:LED
			Panel Type: IPS
			Viewing Angle (CR≥10, H/V): 178°/ 178°
			Resolution: 1920x1080
			Brightness (Typ.):250cd/m <sup>2</sup>
			Contrast Ratio (Typ.):1300:1
			Display Colors:16.7M
			Response Time:1ms MPRT
			Refresh Rate (Max):100Hz
		Features	Flicker-free:Yes
			Trace Free Technology:Yes
			Color Temp. Selection:Yes(4 modes)
			QuickFit:Yes
			HDCP: Yes
		I/O Ports	Low Blue Light:Yes
			HDMI(v1.4):x 1
			D-Sub:x 1
		Power Consumption	Earphone Jack:Yes
			Power Consumption*:<12W
			Power Saving Mode:0.5 W
			Power Off Mode:<0.3W
			Voltage:100-240V, 50/60Hz
		Mechanical Design	Built-in Power
			Tilt:Yes (+23° ~ -5°)
		Dimensions (Esti.)	VESA Wall Mounting:100x100mm
			Phys. Dimension with Stand (W x H x D) : 493.6 x 357.6 x 204.4 mm
			Phys. Dimension without Stand (W x H x D) : 493.6 x 291.2 x 49.7 mm
		Certificate	Box Dimension (W x H x D): 555 x 390 x 130 mm
			TÜV Flicker-free



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			TÜV Low Blue Light
6	Laser Printer 1	Function	Print only
		Print speed	30ppm
		Auto Duplex	Required
		First - Page out	<8.5 sec
		Interface	high speed 2.0
		Standard Input Tray	250 Sheets
		Bypass Tray	Required
		Bypass Input	1 Sheet
		Paper weights	60 to 230g/m2
		Processor	Main:cortex , A9 600MHz , Sub:150MHz
		Memory	64MB
		Max Monthly print volume	35000 pages
		Inbox toner	3000 pages
		Print resolution	up to 1200 x 1200 dpi
		Display	Led
		Quiet Mode	Required
		Power consumption normal printing	Approx - 440w
		Power Consumption in Quiet Mode	Approx - 270w
		Noise level normal printing	LpAm- 48dB
		Noise level Quiet mode	LpAm- 44dB
7	Laser Printer 2	Mandatory Certification	ISO / IEC17991, ISO7779, ISO/IEC19752, India EPR Compliance
		Warranty	1 Year on-site warranty
		Specifications of multi-function lasar printer	Requirement
		Print Speed (A4/Letter)	Up to 34/36 ppm
		Print Resolution	Up to 1,200 x 1200 dpi
		First Print Out Time (Ready)	Less than 8.5 secs
		2-sided Feature ((A4/Letter Auto Duplex Print)	Yes
		Copy Speed (A4/Letter)	Up to 34/36 cpm
		Copy Resolution	600 x 600 dpi
		Reduction/ Enlargement Ratio	25% - 400% in 1% increments
		Copy Features	Multi Copy: Sort/Stack, N in 1
		Scan Speed (Mono/Colour)'	22.5/7.5ipm
		Scanner (Method)	CIS
		Resolution (Optical/Interpolated)	Max. 1,200 x 1,200 dpi/ Max. 19,200 x 19,200 dpi
		Scan to Functions	Sharepoint (Windows only), E-mail, image, OCR, File, FTP, FTPS
		Interface	Hi-Speed 2.0, Ethernet (10 Base-T/100 Base-TX/1000 Base-T), Wi-Fi Direct
		Input Tray (Standard)	250 Sheets
		Manual Slot	1 Sheet



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		Output Tray (Face Down)	120 Sheets
		Automatic Document Feeder (ADF)	50 Sheets
		Media Weights	60 to 230g/m* (Using Manual Feed Slot)
		Media Size	A4, Letter, B5 (JIS), B5 (ISO), A5, A5 (Long Edge), B6 (JIS), A6, Executive, Legal", A4 Short, Folio", Mexico Legal", India Legal
		Processor Speed	600MHz
		Memory	256MB
		Duty Cycle	Max. monthly print Vol. up to 35,000 pages
		Emulation	PCL6, BR-Script3, PDF Version 1.7
		Display	2 Lines LCD (16 characters)
		OS Compatibility	Windows 10, 11, Server 2012 (Network only), Server 2012 R2 (Network only), Server 2016 (Network only), Server 2019 (Network only), Server 2022 (Network only) Linux: CUPS, LPD/LPRng (x86/x64 environment)
		Security Features	Network Security
		Power Consumption (Printing/Printing with Quiet mode)	Approx. 470W/270W
		Power Source	220-240V AC 50/60Hz
		Noise Level (Printing/Printing with Quiet mode)"	LpAm = 49 dB(A)/44 dB(A)
		Dimension (W x D x H)	410 x 399 x 319 mm
		Weight	11.4kg
8	Laser Printer 3	function	Print , scan , copy
		Print speed	34ppm
		Auto Duplex	Required
		First - Page out	<8.5 sec
		Interface	USB , LAN , Dual band Wifi
		Standard Input Tray	250 Sheets
		Bypass Tray	Required
		Bypass Input	1 Sheet
		Paper weights	60 to 230g/m2
		Output tray	120 sheets
		Automatic document feeder	50 sheets
		Processor	Main:cortex , A9 600MHz , Sub:150MHz
		Memory	256MB
		Max Monthly print volume	35000 pages
		Inbox toner	2600 pages
		Print resolution	up to 600 x 600 dpi
		Display	2 lines LCD
		Quiet Mode	Required
		Power consumption normal printing	Approx - 440w
		Power Consumption in Quiet Mode	Approx - 270w
		Noise level normal printing	LpAm- 48dB
		Noise level Quiet mode	LpAm- 44dB





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		Reduction / Enlargement ratio	25%- 400% in 1% incerments
		Copy features	Multi copy : sort / stack, N in 1
		Scan speed (mono/color)	22.5/7.5ipm
		Scanner method	CIS
		Resolution (optical / interpolated)	Max 1200 x 1200 dpi / Max 19200 x 19200 dpi
		Emulation	PCL6, Br-Script 3, Pdf version 1.7
		Security features	Network secirity
		Mandatory Certification	ISO / IEC17991, ISO7779, ISO/IEC19752, India EPR Compliance
		Warranty	1 Year on-site warranty
9	Inktank printer 1	Memory	128MB
		Display	1-Line LCD (16 characters)
		Machine Color	Black
		Print Speed**	Up to 16.0 ipm (mono) and 9.0 ipm (colour)
		Print Speed (Eco Mode)	Up to 27.0 ppm (mono) and 11.0 ppm (colour)
		First Print Out Time***(FPOT)	Up to 6.2 sec (mono) and 9.6 sec (oolour)
		Print Resolution	Up to 1,200 x 6,000 dpi (Windows) / Up to 1,200 x 3,600 dpi (Mac)
		2-Sided Print	Automatic (A4/LTR/EXE/A5)
		Colour Enhancement	Yes
		Borderless Printing	Yes
		Maximum Copy Size	Up to A4/LTR
		Copy Speed (ESAT/sESAT}	Up to 11.0 ipm (mono) and 3.5 ipm (colour)****
		peed CFcoS	Up to 13.0 sec (mono) and 28.5 sec (oolour)
		Copy Resolution	1,200 x 1,800 dpi
		Enlargement / Reduction Ratio	25% - 400% in 1% increments
		N in 1 Copy	2-in-1 / 2-in-1 (ID) / 4-in-1
		Maximum Scan size	Up to A4/LTR
		Scan Resolution	Optical: Up to 1,200 x 2,400 dpi, Interpolated: Up to 19,200 x 19,200 dpi
		Scan Speed A4 (6 100 dpi)	From scanner FB: 3.35 sec/ 4.38 sec (mon
		"Scan To" Feature	Image, OCR, Email, File
		Interface	High Speed USB 2.0,WiFi-Direct, Wireless Lan (2.4 GHz / 5.0 GHz)
		Desktop Solutions	iPrint&Scan Desktop App
		Email Print	Yes
		Paper Input (Standard Tray)	Up to 150-sheets (80 g/m°)
		Paper Input (Manual Feed Slot)	1 Sheet
		Paper Output	Up to 50-sheets (up to A4)
		Paper Handling Sizes (Standard Tray)	A4, LTR, LGL, Folio, EXE, A5, A6, Photo(4"x6"), Indexc card(518"), Photo-2L(5"x7"), C5 Envelope, Com-10, DL Envelope, Monarch, Photo-L(3.5"x5"), Mexico Legal, India Legal
		Paper Handling Sizes (Manual Feed Slot)	A4, LTR, LGL, Folio, EXE, A5, A6, Photo(4"x6"), Indexc card(518"), Photo-2L(5"x7"), C5 Envelope, Com-10, DL Envelope, Monarch, Photo-L(3.5"x5"), Mexico Legal, India Legal



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		Media Type (Standard Tray)	Plain, Inkjet, Glossy (cast/resin), Recycled [Media weight 64-220g/m <sup>2</sup> )
		Media Type (Manual Feed Slot)	Plain, Inkjet, Glossy (cast/resin), Recycled [Media weight 64-300g/m <sup>2</sup> )
		Without Canon	390mm x 343mm x 148.5mm (7.2kg)
		Warranty	30,000 pages or 1 years whichever is earlier
10	Inktank printer 2	Memory	128MB
		Display	1-Line (20 characters)
		Machine Color	Black
		Print Speed	Up to 17.0 ipm (mono) and 16.5 ipm (colour)
		Print Speed (Eco Mode)	Up to 30.0 ppm (mono) and 26.0 ppm (colour)
		First Print Out TimeM(FPOT)	Up to 6.0 sec (mono) and 6.5 sec (colour)
		Print Resolution	Up to 1,200 x 6,000 dpi
		2-Sided Print	Automatic (A4/LTR/EXE/AS)
		Colour Enhancement	Yes
		Borderless Printing	Yes
		Maximum Copy Size	UptoA4/LTR
		Copy Speed (ESAT/sESAT)	Up to 13.0 ipm (mono) and 10.5 ipm (colour)o,1
		Copy Speed (FCOT)M	Up to 10.5 sec (mono) and 21.0 sec (colour)
		Copy Resolution	1,200 x 2,400 dpi
		Enlargement / Reduction Ratio	25% - 400% in 1% increments
		Nin 1 Copy	2-in-1 / 2-in-1 (ID) / 4-in-1
		Maximum Scan Size	Up toA4/LTR
		Scan Resolution	Optical: Up to 1,200 x 2,400 dpi (ADF: Up to 1,200 x 600 dpi), Interpolated: Up to 19,200 x 19,200 dpi (For Windows 10/11 with TWAIN)
		Scan Speed A4 (@ 100 dpi)	From scanner FB: 3.35 sec/ 4.38 sec (mono/color)
		"Scan To" Feature	Image, OCR, Email, File
		Interface	High Speed USS 2.0,WiFi-Direct, Wireless Lan (2.4 GHz/ 5.0 GHz), Ethernet
		Desktop Solutions	iPrint&Scan Desktop App
		Email Print	Yes
		Paper Input (Standard Tray)	Up to 150-sheets (80g/m <sup>2</sup> )
		Paper Input (Multi-Purpose Tray)	80 Sheets (Plain Paper - 80g/m <sup>2</sup> ) 20 Sheets (Glossy Paper)
		Paper Output	Up to SO-sheets (up to A4)
		Automatic Document Feeder	Up to 20-sheets (80g/m <sup>2</sup> )
		Paper Handling Sizes (Standard Tray)	A4, LTR, LGL, Folio, EXE, AS, A6, Photo(4"x6"), Indexcard(5"x8"), Photo-2L(5"x7"), CS Envelope, Com-10, DL Envelope, Monarch, Photo-L(3.5"x5"), Mexico Legal, India Legal
		Paper Handling Sizes (Multi-Purpose Tray)	A4, LTR, LGL, Folio, EXE, AS, A6, Photo(4"x6"), Indexcard (5"x8"), Photo-2L(5"x7"), CS Envelope, Com-10, DL Envelope, Monarch, Photo-L(3.5"x5"), Mexico Legal, India Legal
		Media Type (Standard Tray)	Plain, Inkjet, Glossy (casVresin), Recycled [Media weight 64-220g/m <sup>2</sup> ]
		Media Type (Multi-Purpose Tray)	Plain, Inkjet, Glossy (casVresin), Recycled [Media weight 64-220g/m <sup>2</sup> ]



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		Supported Operating Systems	Windows: 10 / 11 / Server 2016 / 2019 / 2022, macoso,lv12/13/14 , Linux OS , Chrome OS
		Without Carton	435mm x 418mm x 180mm (9.6kg)
		Warranty	50,000 pages or 1 years whichever is earlier
11	Uninterrupted Power Supply	1kVA/800W Online UPS with 30 minutes backup	1kVA/800W Online UPS with 30 minutes backup using SMF Battery with minimum 936VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
12	Uninterrupted Power Supply	1kVA/800W Online UPS with 60 minutes backup	1kVA/800W Online UPS with 60 minutes backup using SMF Battery with minimum 1512VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
13	Uninterrupted Power Supply	1kVA/800W Online UPS with 120 minutes backup	1kVA/800W Online UPS with 120 minutes backup using SMF Battery with minimum 3600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
14	Uninterrupted Power Supply	2kVA/1600W Online UPS with 30 minutes backup	2kVA/1600W Online UPS with 30 minutes backup using SMF Battery with minimum 1872VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
15	Uninterrupted Power Supply	2kVA/1600W Online UPS with 60 minutes backup	2kVA/1600W Online UPS with 60 minutes backup using SMF Battery with minimum 3024VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
16	Uninterrupted Power Supply	2kVA/1600W Online UPS with 120 minutes backup	ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.



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17	Uninterrupted Power Supply	3kVA/2400W Online UPS with 30 minutes backup	3kVA/2400W Online UPS with 30 minutes backup using SMF Battery with minimum 3024VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
18	Uninterrupted Power Supply	3kVA/2400W Online UPS with 60 minutes backup	3kVA/2400W Online UPS with 60 minutes backup using SMF Battery with minimum 4680VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
19	Uninterrupted Power Supply	3kVA/2400W Online UPS with 120 minutes backup	3kVA/2400W Online UPS with 120 minutes backup using SMF Battery with minimum 8640VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
20	Uninterrupted Power Supply	5kVA/5000W Online UPS with 30 minutes backup	5kVA/5000W Online UPS with 30 minutes backup using SMF Battery with minimum 4992VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
21	Uninterrupted Power Supply	5kVA/5000W Online UPS with 60 minutes backup	5kVA/5000W Online UPS with 60 minutes backup using SMF Battery with minimum 8064VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
22	Uninterrupted Power Supply	5kVA/5000W Online UPS with 120 minutes backup	5kVA/5000W Online UPS with 120 minutes backup using SMF Battery with minimum 14040VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.





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23	Uninterrupted Power Supply	6kVA/6000W Online UPS with 30 minutes backup	6kVA/6000W Online UPS with 30 minutes backup using SMF Battery with minimum 6240VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
24	Uninterrupted Power Supply	6kVA/6000W Online UPS with 60 minutes backup	6kVA/6000W Online UPS with 60 minutes backup using SMF Battery with minimum 9072VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
25	Uninterrupted Power Supply	6kVA/6000W Online UPS with 120 minutes backup	6kVA/6000W Online UPS with 120 minutes backup using SMF Battery with minimum 15600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
26	Uninterrupted Power Supply	10kVA/10000W Online UPS with 30 minutes backup	10kVA/10000W Online UPS with 30 minutes backup using SMF Battery with minimum 10080VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
27	Uninterrupted Power Supply	10kVA/10000W Online UPS with 60 minutes backup	10kVA/10000W Online UPS with 60 minutes backup using SMF Battery with minimum 15600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
28	Uninterrupted Power Supply	10kVA/10000W Online UPS with 120 minutes backup	10kVA/10000W Online UPS with 120 minutes backup using SMF Battery with minimum 24000VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.



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### 3PHASE INPUT - 1P OUTPUT ONLINE UPS WITH BACKUP

29	Uninterrupted Power Supply	10kVA/10000W Online UPS with 30 minutes backup	10kVA/10000W Online UPS with 30 minutes backup using SMF Battery with minimum 10080VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
30	Uninterrupted Power Supply	10kVA/10000W Online UPS with 60 minutes backup	10kVA/10000W Online UPS with 60 minutes backup using SMF Battery with minimum 15600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
31	Uninterrupted Power Supply	15kVA/15000W Online UPS with 30 minutes backup	15kVA/15000W Online UPS with 30 minutes backup using SMF Battery with minimum 13100VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
32	Uninterrupted Power Supply	15kVA/15000W Online UPS with 60 minutes backup	15kVA/15000W Online UPS with 60 minutes backup using SMF Battery with minimum 21160VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
33	Uninterrupted Power Supply	20kVA/20000W Online UPS with 30 minutes backup	20kVA/20000W Online UPS with 30 minutes backup using SMF Battery with minimum 20160VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
34	Uninterrupted Power Supply	20kVA/20000W Online UPS with 60 minutes backup	20kVA/20000W Online UPS with 60 minutes backup using SMF Battery with minimum 32400VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.



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			<b>3PHASE INPUT - 3P OUTPUT ONLINE UPS WITH BACKUP</b>
35	Uninterrupted Power Supply	10kVA/10000W Online UPS with 30 minutes backup	10kVA/10000W Online UPS with 30 minutes backup using SMF Battery with minimum 10080VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
36	Uninterrupted Power Supply	10kVA/10000W Online UPS with 60 minutes backup	10kVA/10000W Online UPS with 60 minutes backup using SMF Battery with minimum 15600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
37	Uninterrupted Power Supply	15kVA/15000W Online UPS with 30 minutes backup	15kVA/15000W Online UPS with 30 minutes backup using SMF Battery with minimum 13100VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
38	Uninterrupted Power Supply	15kVA/15000W Online UPS with 60 minutes backup	15kVA/15000W Online UPS with 60 minutes backup using SMF Battery with minimum 21160VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
39	Uninterrupted Power Supply	20kVA/20000W Online UPS with 30 minutes backup	20kVA/20000W Online UPS with 30 minutes backup using SMF Battery with minimum 20160VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
40	Uninterrupted Power Supply	20kVA/20000W Online UPS with 60 minutes backup	20kVA/20000W Online UPS with 60 minutes backup using SMF Battery with minimum 32400VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.





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41	Uninterrupted Power Supply	30kVA/30000W Online UPS with 30 minutes backup	30kVA/30000W Online UPS with 30 minutes backup using SMF Battery with minimum 31200VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
42	Uninterrupted Power Supply	30kVA/30000W Online UPS with 60 minutes backup	30kVA/30000W Online UPS with 60 minutes backup using SMF Battery with minimum 48000VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
43	Uninterrupted Power Supply	40kVA/40000W Online UPS with 30 minutes backup	40kVA/40000W Online UPS with 30 minutes backup using SMF Battery with minimum 43200VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
44	Uninterrupted Power Supply	40kVA/40000W Online UPS with 60 minutes backup	40kVA/40000W Online UPS with 60 minutes backup using SMF Battery with minimum 63300VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
45	Uninterrupted Power Supply	60kVA/60000W Online UPS with 30 minutes backup	60kVA/60000W Online UPS with 30 minutes backup using SMF Battery with minimum 57600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.
46	Uninterrupted Power Supply	60kVA/60000W Online UPS with 60 minutes backup	60kVA/60000W Online UPS with 60 minutes backup using SMF Battery with minimum 96000VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS , SMF Battery Rack and interconnected Link.





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47	Uninterrupted Power Supply	100kVA/100000W Online UPS with 30 minutes backup	100kVA/100000W Online UPS with 30 minutes backup using SMF Battery with minimum 105600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS, SMF Battery Rack and interconnected Link.
48	Uninterrupted Power Supply	100kVA/100000W Online UPS with 60 minutes backup	100kVA/100000W Online UPS with 60 minutes backup using SMF Battery with minimum 165600VAH. UPS should be CE certified. UPS OEM Mandatory certification and documents : i) ISO 9001, 14001, 45001 & 14064, ii)OEM should have NABL certified Calibration Lab in India, iii)Leed Certified Factory Setup iv) UPS datasheet along with Manual should be available in OEM website (URL link). For onsite service there should be 24X7X365 Days Dedicated Active Toll Free No available. Warranty : 02 years on UPS, SMF Battery Rack and interconnected Link.
B	NETWORKING		
1	SWITCH	PoE 16 port	<div>Should have 16× PoE+ gigabit RJ45 ports, 2× gigabit non-PoE RJ45 ports and 2× combo gigabit SFP slots</div> <div>Should have support PoE Auto Recovery automatically reboots your dropped or unresponsive PoE-powered devices.</div> <div>Should have High PoE power budget with up to 30W for each PoE port and 192W for all PoE ports</div> <div>Should have at least 36 Gbps switching fabric.</div> <div>Should have support Packet Forwarding of 26.78 Mpps and Packet buffer of 4.1Mbit</div> <div>Should have support L2 Features like IGMP Snooping V1/V2/V3, Static Link Aggregation, Port Mirroring, Cable Diagnostics ,Loop Prevention</div> <div>Should support at least 8K entries in the MAC table.</div> <div>Should Support up to 32 VLANs simultaneously out of 4K VLAN IDs</div> <div>Should have support up to 32 VLANs simultaneously (out of 4K VLAN IDs) MTU/Port/Tag VLAN</div> <div>Switch should support IEEE 802.3af &amp; IEEE 802.3at on Ethernet ports &amp; Min 192 PoE Power Budget.</div> <div>Should have AC Power Supply 100 to 240 V AC with 50 to 60 Hz and equipped with 3 pin plug.</div> <div>Switch should Operate between Temperature: 0°C~40°C</div> <div>Switch should come with Rack mounting kit and all accessories</div> <div>Switch must be managed by WEB-GUI</div> <div>Device OEM must be must be ISO 9001 &amp; 14001 Certified at the time of bidding</div> <div>Product Must be made in India</div>
2	SWITCH	PoE 24 port	<div>Rack mountable with 24 Nos. 10/100/1000 Base-T ports with 4 no. 1Gig SFP Ports</div> <div>Minimum 56 Gbps Switching Fabric.</div> <div>Minimum packet forwarding rate of 41 million packets per second at 64 - byte packet length.</div> <div>Support PoE Budget of not less than 350 Watt</div> <div>Support 802.3af &amp; 802.3at PoE Standard</div> <div>Minimum 16K MAC addresses.</div> <div>1000 IGMP groups.</div> <div>The switch shall be able to work on both IPv4 and IPv6 (dual stack) from day one.</div>



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		<p>All ports in the switch shall operate at wire-speed / line-rate.</p> <p>Capable of working with AC Power Supply with a voltage varying from 170-240Volts at 50 +/-2 Hz.</p> <p>Support 19" rack mounting.</p> <p>Support IEEE 802.1Q VLAN encapsulation. Maximum 4K VLAN Groups</p> <p>Support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration &amp; errors.</p> <p>Support for creating/ modifying/ Deleting VLAN manually / automatically if required</p> <p>Support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab, 802.3ad.</p> <p>Support Spanning-Tree root guard or any other industry standard protocol to prevent other edge switches becoming the root bridge.</p> <p>Support IGMP snooping v1, v2 and v3.</p> <p>Support Link Aggregation Protocol (LACP).</p> <p>Support 802.3ah Ethernet Link OAM for Detection of Unidirectional links and to disable them to avoid problems such as spanning tree loops and support Unidirectional Link Detection (UDLD) or equivalent.</p> <p>It shall be able to discover the neighbouring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.</p> <p>Support for Switch port auto recovery to automatically re-enable a link that is disabled because of a network error.</p> <p>Support Multicast VLAN registration.</p> <p>Support LLDP / LLDP-MED including client location information. It shall exchange link and device information in multi-vendor networks.</p> <p>It shall support configuration rollback to replace current configuration with any saved configuration file.</p> <p>Support link state tracking which provides layer 2 redundancy in the network when used in conjunction with server teaming.</p> <p>Support configurable maximum transmission unit (MTU) of up to 9000 bytes, with a maximum Ethernet frame size of 9018 bytes (Jumbo frames) for bridging on Gigabit Ethernet ports.</p> <p>Support auto sensing speed on 10/100/1000 ports, auto negotiating half/full-duplex on all ports and Auto-MDIX.</p> <p>Shall have per-port broadcast, multicast, and unicast storm control.</p> <p>It shall have standard 802.1p CoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address, or Layer 4 TCP or UDP port number.</p> <p>Eight egress queues per port to enable differentiated management of up to eight traffic types.</p> <p>There shall be weighted round robin (WRR) or any other industry standard protocol to provide congestion avoidance.</p> <p>Strict priority queuing mechanisms.</p> <p>Granular Rate Limiting functions to guarantee bandwidth in increments shall be as low as 64 Kbps.</p> <p>Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields, using QoS ACLs (IP ACLs (IPv4 and IPv6) or MAC ACLs), class maps, and policy maps shall be available. ACL should be</p>
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		<p>based on user defined packet content (Max. 6bytes length user defined).</p> <p>There shall be support for Asynchronous data flows upstream and downstream from the end station or on the uplink using ingress policing and egress shaping.</p> <p>There shall be support for Automatic Quality of Service for easy configuration of QoS features for critical applications.</p> <p>The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security, providing user authentication.</p> <p>The LAN switch shall support for Admission Control features to improve the network's ability to automatically identify, prevent, and respond to security threats and also to enable the switches to collaborate with third-party solutions for security-policy compliance and enforcement before a host is permitted to access the network.</p> <p>Support port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports. It shall also support VLAN based filters.</p> <p>Support unicast MAC filtering to prevent the forwarding of any type of packet with a matching MAC address. It shall support Unicast and Multicast MAC addresses and associated VLANs.</p> <p>It shall support unknown unicast and multicast port blocking to allow tight control by filtering packets that the switch has not already learned how to forward.</p> <p>Support IGMP filtering which shall provide multicast authentication by filtering out no subscribers and limits the number of concurrent multicast streams available per port.</p> <p>Support for SSHv2, SNMPv3 to provide network security by encrypting administrator traffic during remote management</p> <p>Support 2 session of Port Mirroring based on port basis / VLAN basis to support intrusion prevention system deployment in different VLANs. It shall support bidirectional data on mirror port which allows IDS to take action when an intruder is detected.</p> <p>Support RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.</p> <p>Support MAC address notification to allow administrators to be notified of users added to or removed from the network / It shall support SNMP Trap for new MAC notification.</p> <p>Support DHCP snooping to allow administrators to ensure consistent mapping of IP to MAC addresses. This can be used to prevent attacks that attempt to poison the DHCP binding database, and to rate limit the amount of DHCP traffic that enters a switch port.</p> <p>Support DHCP Interface Tracker (Option 82) to augment a host IP address request with the switch port ID or similar mechanism</p> <p>Support port security to secure the access to an access or trunk port based on MAC address. After a specific timeframe, the aging feature should remove the MAC address from the switch to allow another device to connect to the same port.</p> <p>Support multilevel security on console access to prevent unauthorized users from altering the switch configuration.</p> <p>Support BPDU Guard feature, to shut down Spanning Tree Protocol Port Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.</p> <p>Support Spanning-Tree Root Guard (STRG) to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.</p>
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			<p>Support for up to 512 access control entries (ACEs).</p> <p>CLI / web-based management (GUI) support to provide a common user interface and command set with all routers and switches of the same vendor.</p> <p>Remote Monitoring (RMON v1 and v2) software agent to support for enhanced traffic management, monitoring, and analysis.</p> <p>Support for RMON groups through the use of a mirrored port, which permits traffic monitoring of a single port, a group of ports, or the entire switch from a single network analyzer or RMON probe.</p> <p>It shall have Time-Domain Reflectometer (TDR) or equivalent technology to diagnose and resolve cabling problems on copper ports.</p> <p>It shall have layer 2 trace route to ease troubleshooting by identifying the physical path that a packet takes from source to destination or it shall support OAM 802.3ah.</p> <p>Support Trivial File Transfer Protocol (TFTP) and File Transfer Protocol (FTP) to reduce the cost of administering software upgrades by downloading from a centralized location.</p> <p>Support Simple Network Time Protocol/Network Timing Protocol (SNTP/NTP) to provide an accurate and consistent timestamp to all intranet switches.</p> <p>Support SNMPv1, SNMPv2, and SNMPv3 and Telnet interface to deliver comprehensive in-band management, and a CLI-based management console to provide detailed out-of-band management.</p> <p>Support IPV6 management. ACL and QoS and IPV6 Neighbour Discovery.</p> <p>Warranty Should be for 3 Years</p>
3	SWITCH	PoE 48 port	<p><b>Physical Specification:</b></p> <p>The LAN switch shall be rack mountable with 48 Nos. 10/100/1000 Base-T ports PoE Ports with 4 Nos. SFP Ports</p> <p><b>General Specification:</b></p> <p>The LAN switch shall be available with minimum 104 Gbps Switching Fabric.</p> <p>The LAN switch shall have minimum packet forwarding rate of 77.4 million packets per second at 64 byte packet length.</p> <p>The LAN switch shall support minimum 16K MAC addresses.</p> <p>The LAN Switch should support PoE Budget of 384W</p> <p>The LAN Switch must support Packet Buffer Memory 12 Mbit</p> <p>There shall be 512 IGMP groups.</p> <p>The switch shall be able to work on both IPv4 and IPv6 (dual stack) from day one.</p> <p>All ports in the switch shall operate at wire-speed / line-rate.</p> <p>The switch shall be capable of working with AC Power Supply with a voltage varying from 170-240Volts at 50 +/-2 Hz.</p> <p>The switch shall support 19 inch rack mounting.</p> <p><b>Layer - 2 Features:</b></p> <p>The LAN switch shall support IEEE 802.1Q VLAN encapsulation. Maximum 4K VLAN Groups.</p> <p>It shall support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab,802.3ad.</p> <p>It shall support spanning-tree root guard or any other industry standard protocol to prevent other edge switches becoming the root bridge.</p> <p>It shall support IGMP snooping v1, v2 and v3.</p>





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		<p>It shall support Link Aggregation Protocol (LACP).</p> <p>It shall Support 802.3ah Ethernet Link OAM for Detection of Unidirectional links and to disable them to avoid problems such as spanning tree loops and support Unidirectional Link Detection (UDLD) or equivalent.</p> <p>It shall be able to discover the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.</p> <p>It shall support for Switch port auto recovery (err disable) to automatically re- enable a link that is disabled because of a network error.</p> <p>It shall support Multicast VLAN registration.</p> <p>It shall support LLDP / LLDP-MED including client location information. It shall exchange link and device information in multi vendor networks.</p> <p>It shall support configuration rollback to replace current configuration with any saved configuration file.</p> <p>It shall support configurable maximum transmission unit (MTU) of up to 9000 bytes, with a maximum Ethernet frame size of 9018 bytes (Jumbo frames) for bridging on Gigabit Ethernet ports.</p> <p>It shall support auto sensing speed on 10/100/1000 ports, auto negotiating half/full-duplex on all ports and Auto-MDIX.</p> <p><b>QoS Features:</b></p> <p>The LAN switch shall have per-port broadcast, multicast, and unicast storm control.</p> <p>It shall have standard 802.1p CoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address, or Layer 4 TCP or UDP port number.</p> <p>There shall be eight egress queues per port to enable differentiated management of up to eight traffic types.</p> <p>There shall be weighted round robin (WRR) or any other industry standard protocol to provide congestion avoidance.</p> <p>There shall be strict priority queuing mechanisms.</p> <p>Granular Rate Limiting functions to guarantee bandwidth in increments shall be as low as 64 Kbps.</p> <p>Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields, using QoS ACLs (IP ACLs (IPv4 and IPv6) or MAC ACLs), class maps, and policy maps shall be available. ACL should be based on user defined packet content (Max. 6bytes length user defined).</p> <p>There shall be support for Asynchronous data flows upstream and downstream from the end station or on the uplink using ingress policing and egress shaping.</p> <p>There shall be support for Automatic Quality of Service for easy configuration of QoS features for critical applications.</p> <p><b>Network Security Features:</b></p> <p>The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security, providing user authentication.</p> <p>The LAN switch shall support for Admission Control features to improve the network's ability to automatically identify, prevent, and respond to security threats and also to enable the switches to collaborate with third-party solutions for security-policy compliance and enforcement before a host is permitted to access the network.</p> <p>It shall support port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on</p>
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		<p>individual switch ports. It shall also support VLAN based filters.</p> <p>It shall support unicast MAC filtering to prevent the forwarding of any type of packet with a matching MAC address. It shall support Unicast and Multicast MAC addresses and associated VLANs.</p> <p>It shall support unknown unicast and multicast port blocking to allow tight control by filtering packets that the switch has not already learned how to forward.</p> <p>It shall support IGMP filtering which shall provide multicast authentication by filtering out no subscribers and limits the number of concurrent multicast streams available per port.</p> <p>It shall support for SSHv2, SNMPv3 to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.</p> <p>The switch shall support 2 session of Port Mirroring based on port basis / VLAN basis to support intrusion prevention system deployment in different VLANs. It shall support bidirectional data on mirror port which allows IDS to take action when an intruder is detected.</p> <p>It shall support RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.</p> <p>It shall support MAC address notification to allow administrators to be notified of users added to or removed from the network / It shall support SNMP Trap for new MAC notification.</p> <p>It shall support DHCP snooping to allow administrators to ensure consistent mapping of IP to MAC addresses. This can be used to prevent attacks that attempt to poison the DHCP binding database, and to rate limit the amount of DHCP traffic that enters a switch port.</p> <p>It shall support DHCP Interface Tracker (Option 82) to augment a host IP address request with the switch port ID.</p> <p>It shall support port security to secure the access to an access or trunk port based on MAC address. After a specific timeframe, the aging feature should remove the MAC address from the switch to allow another device to connect to the same port.</p> <p>It shall support multilevel security on console access to prevent unauthorized users from altering the switch configuration.</p> <p>It shall support BPDU Guard feature, to shut down Spanning Tree Protocol Port Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.</p> <p>It shall support Spanning-Tree Root Guard (STRG) to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.</p> <p>It shall support for up to 512 access control entries (ACEs).</p> <p><b>Management:</b></p> <p>The LAN switch shall have CLI support to provide a common user interface and command set with all routers and switches of the same vendor.</p> <p>It shall have Remote Monitoring (RMON v1 and v2) software agent to support for enhanced traffic management, monitoring, and analysis.</p> <p>It shall have support for RMON groups through the use of a mirrored port, which permits traffic monitoring of a single port, a group of ports, or the entire switch from a single network analyzer or RMON probe.</p>
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		<div>It shall have layer 2 trace route to ease troubleshooting by identifying the physical path that a packet takes from source to destination or it shall support OAM 802.3ah.</div> <div>It shall support Trivial File Transfer Protocol (TFTP) and File Transfer Protocol (FTP) to reduce the cost of administering software upgrades by downloading from a centralized location.</div> <div>It shall support Simple Network Time Protocol/Network Timing Protocol (SNTP/NTP) to provide an accurate and consistent timestamp to all intranet switches.</div> <div>It shall support RMON v1 and v2 standards.</div> <div>It shall support SNMPv1, SNMPv2, and SNMPv3 and Telnet interface to deliver comprehensive in-band management, and a CLI-based management console to provide detailed out-of-band management.</div> <div>It shall support IPV6 management. ACL and QoS and IPV6 Neighbor Discovery.</div> <div>It Shall Support SDN Platform and have Provision to be Work Standalone or Controller Based and support Zero-Touch Provisioning (ZTP)</div> <div>Device OEM must be must be ISO 9001 &amp; 14001 Certified at the time of bidding</div> <div>Device OEM must be Gartner Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure in Last 4 Quarter</div>
4	SERVER	<div>1xIntel Xeon 6353P 8C 2.7GHz 65W</div> <div>2.8 Ghz</div> <div>24 MB</div> <div>32GB TruDDR5 5600MHz (2Rx8) ECC UDIMM</div> <div>Open Bay</div> <div>8Bay 2.5" SAS/SATA Backplane</div> <div>OB SATA RAID Mode</div> <div>Xclarity Platinum</div> <div>Broadcom NX 4x1G Base-T , 1 x 800WP AC PSU CRPS v1.4</div> <div>3 Year Onsite</div> <div>32GB TruDDR5 5600MHz (2Rx8) ECC UDIMM</div> <div>2.5" Multi Vendor 960GB Read Intensive SATA 6Gb HS SSD v2</div> <div>800W 230V/115V Platinum CRPS Hot-Swap Power Supply v1.1</div>

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5	Wifi Access Point	<p>AP shall have hardened enclosures for indoor deployment and shall have a robust design for durability</p> <p>It shall have dual radios for concurrent dual band (5 GHz / 2.4 GHz) operation</p> <p>It shall have Simultaneous 574 Mbps on 2.4 GHz and 1201 Mbps on 5 GHz</p> <p>Minimum one number of 1 Gbps Ethernet port RJ-45.</p> <p>AP shall support Mu-MIMO with OFDMA</p> <p>AP Shall Support 1024 QAM for More Data Encoding</p> <p>AP Shall Support BSS Coloring and TWT (Target Wake Time)</p> <p>AP Shall Support support WPA-PSK /WPA2 -PSK /WPA3-PSK Wireless Security</p> <p>AP shall support Outfitted with the latest 802.11ax technology</p> <p>The AP shall comply with IEEE 802.11ac at a minimum and be backwards compatible to IEEE 802.11a/b/g/n/ac standards.</p> <p>AP shall operate at least in full 2x2:2 MIMO or more mode without any loss of features or capabilities</p> <p>AP shall Support PoE 802.3at and DC Jack for convenient and affordable installation</p> <p>AP must support 20 MHz, 40 MHz and 80 MHz channels.</p> <p>AP must support High Density Environment for Larger Device Association.</p> <p>The AP shall provide a minimum of 20 dBm EIRP for both 2.4 GHz and and 23 dBm for 5 GHz frequencies. Field deployment shall be with EIRP as per regulatory guidelines.</p> <p>AP shall support WDS or MESH networking*</p> <p>AP shall support QoS and WMM latest technology</p> <p>AP shall support Multiple operating modes including managed AP and standalone AP mode</p> <p>AP shall support Band Steering, Beamforming, Airtime Fairness and Load Balance features</p> <p>AP shall support rogue access point detection</p> <p>AP shall have dual-Band Omni-directional Antenna, either internal or external.</p> <p>AP should be compatible for Simple mounting on any wall or ceiling surface</p> <p>AP should support management VLAN and SSID VLAN</p> <p>AP should support Captive portal and Rate limit feature</p> <p>AP shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/AP/Client</p> <p>Intelligent RF control plane for self-healing, and self-optimization</p> <p>AP Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN Mapping</p> <p>AP shall support 802.1X authentication and external radius server</p> <p>AP shall be able to assign end User the IP address as received from backend core DHCP Server.</p> <p>AP shall support Hardware controller or software controller and must be SDN Ready</p> <p>AP Shall support ZTP (Zero Touch Provisioning ) for seamless Installations</p> <p>Shall support L3 management, SNMP, Email notification and Telnet feature</p> <p>Shall support Operating Temperature of 32°F~144°F</p> <p>Device OEM must be ISO 9001 and 14001 Certified</p> <p>Device OEM must be Gartner Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure in Last 4 Quarter</p>
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6	Hardware Controller		<ol style="list-style-type: none"><li>1. Wireless Controller should be Hardware based must be loaded with 300 nos. Access Point Perpetual licenses from Day 1</li><li>2. Controller should have capability to Control, Configure, Manage and Monitor both Indoor and Outdoor Access Points</li><li>3. Shall Support multiple captive portal authentications mechanism including simple password, radius, voucher, custom based, etc.</li><li>4. Controller shall Manage Multiple Sites with the Centralized Controller in a Single Location</li><li>5. Controller shall Intuitive Real Time Monitoring and data usage</li><li>6. Controller shall support remote upgrade and access control features</li><li>7. Shall support L3 management using standard SNMP/ SSH/ TELNET protocols</li><li>8. Access Control and Rogue AP Detection protect the network from threats</li><li>9. Rate Limit and Load Balance features must be included to ensure the network stability and efficiency</li><li>10. Configure and automatically synchronize unified wireless settings to all EAPs in the network</li><li>11. Support for visual Wi-Fi network deployment and optimization</li><li>12. View the real-time traffic status of each AP, including the number of clients and volume of data usage</li><li>13. Controller shall have 3 years onsite warranty as well as 3 years Remote Support</li></ol>
C	SECURITY CAMERA		
Sr.No	Item Name	Specification	Item Description
1	6 MP VF BULLET CAMERA	Image Sensor	1/2.4 inch Progressive Scan CMOS
		Max. Resolution	3200 × 1800
		Min. Illumination	Color: 0.005 Lux @ F1.6 0
		Shutter Time	1/3 s to 1/100,000 s
		Day & Night	IR cut filter
		Lens Type	Motorized varifocal lens, 2.7 to 13.5 mm
		Focal Length & FOV	2.7 to 13.5 mm, horizontal FOV 102.3° to 36.5°, vertical FOV 53.9° to 20.6°, diagonal FOV 122.9° to 41.9°
		Iris Type	Auto-iris
		Aperture	F1.6
		DORI	2.7 to 13.5 mm: D: 75.3 m to 201.0 m, O: 29.9 m to 79.8 m, R: 15.1 m to 40.2 m, I: 7.5 m to 20.1 m
		IR Range	Up to 60 m, White Light
		Smart Supplement Light	Available
		Main Stream	60 Hz: 30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
		Sub-Stream	60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
		Third Stream	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)
		Fourth Stream	60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)
		Video Compression	Main stream: H.265/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG,
		Video Bit Rate	32 Kbps to 16 Mbps
		Region of Interest (ROI)	Supported
		Target Cropping	Available



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		Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
		Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)
		Environment Noise Filtering	Supported
		Protocols	TCP/IP, Multicast, UDP,HTTP, HTTPS, DHCP, DNS, DDNS, RTSP, RTCP, NTP, UPnP, SMTP, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSockets,SISTP,NAT
		Simultaneous Live View	Up to 6 channels
		API	ONVIF (Profile S, Profile G)
		Security	Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, digest authentication for HTTP/HTTPS, TLS 1.3, WSSE and digest authentication for ONVIF
		User/Host	Up to 32 users 3 user levels
		Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR), memory card encryption and health detection are supported.
		Image Parameters Switch	Supported
		Day/Night Switch	Day, Night, Auto, Schedule
		Wide Dynamic Range (WDR)	120 dB
		SNR	≥ 52 dB
		Image Enhancement	BLC, HLC, 3D DNR
		Privacy Mask	Supported , 8 Area
		Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
		Audio	Built-in Microphone: Arrayed dual-microphone,
		On-Board Storage	Built-in memory card slot, support micro SD/micro SDHC/micro SDXC card, up to 512 GB
		Alarm	1 input, 1 output (max. 24 VDC/24 VAC, 1 A)
		Reset Key	Available
		Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
		Smart Event	Unattended baggage detection, object removal detection, loitering detection, people gathering detection, fast moving detection, parking detection, video quality diagnosis
		Linkage	Upload to NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture
		Smart Features	Face capture, perimeter protection, Line corssing ,Intrusion detection, Human and vehicle detection , region entrance and exit .
		Power	PoE: IEEE 802.3at, Power consumption 15 w
		Material	Metalic body
		Startup and Operating Conditions	.-30 °C to 60 °C
		General Function	Heartbeat, mirror, flash log, password reset via email, pixel counter, anti-banding
		Protection	IP67, IK10
2	4 MP BULLET	Image Sensor	1/3 inch Progressive Scan CMOS
		Max. Resolution	2560 × 1440
		Shutter Time	1/3 s to 1/100,000 s
		Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
		Day & Night	IR cut filter



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		Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°
		Lens Type	Fixed focal lens, 2.8 mm / 4 mm
		Focal Length & FOV	4 mm, horizontal FOV 78°, vertical FOV 42°, diagonal FOV 93°
		Lens Mount	M12
		Iris Type	Fixed
		Aperture	F1.6
		DORI	4 mm, D: 78 m, O: 31 m, R: 15 m, I: 7 m
		Supplement Light Type	IR, Up to 30 m
		Main Stream	60 Hz: 20 fps (2560 × 1440); 24 fps (1920 × 1080, 1280 × 720)
		Sub-Stream	60 Hz: 24 fps (1280 × 720, 640 × 480, 640 × 360)
		Third Stream	60 Hz: 1 fps (640 × 360)
		Video Bit Rate	32 Kbps to 8 Mbps
		Region of Interest (ROI)	Supported
		Security	Password protection, complicated password, watermark, digest authentication for HTTP, WSSE and digest authentication for ONVIF, TLS 1.3
		Simultaneous Live View	Up to 6 channels
		Protocols	TCP/IP, UDP, Multicast, NTP, DDNS, SNMP, QoS, DHCP, IPv4, IPv6, DNS, HTTP, HTTPS, RTSP, SRTP/RTSPS, Bonjour, NAT, RTCP, UPnP, ONVIF, SSH, SMTP, ARP
		Wide Dynamic Range (WDR)	120 dB
		SNR	≥ 52 dB
		Day/Night Switch	Day, Night, Auto, Schedule
		Image Enhancement	BLC, HLC, 3D DNR
		Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
		Privacy Mask	Supported
		Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
		Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
		Linkage	Upload to FTP/SFTP, Send email, notify surveillance center, trigger capture
		Power	12 VDC ± 25%, 0.5 A, max. 6 W, PoE: IEEE 802.3af, Class 3, max. 7.5 W
		Material	Metalic body
3	4 MP DOME	Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
		General Function	Heartbeat, anti-banding, mirror, password protection, password reset via email
		Protection	IP67
		Image Sensor	1/3 inch Progressive Scan CMOS
		Max. Resolution	2560 × 1440
		Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
		Shutter Time	1/3 s to 1/100,000 s
		Day & Night	IR cut filter
		Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
		Lens Type	Fixed focal lens, 2.8 mm
		Focal Length & FOV	2.8 mm, horizontal FOV 98°, vertical FOV 54°, diagonal FOV 114°
		Lens Mount	M12
		Iris Type	Fixed
		Aperture	F1.6



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		DORI	2.8 mm, D: 63 m, O: 25 m, R: 12 m, I: 6 m
		Supplement Light Type	IR,Up to 30 m
		Main Stream	60 Hz: 20 fps (2560 × 1440); 24 fps (1920 × 1080, 1280 × 720)
		Sub-Stream	60 Hz: 24 fps (1280 × 720, 640 × 480, 640 × 360)
		Third-Stream	60 Hz: 1 fps (640 × 360)
		Video Bit Rate	32 Kbps to 8 Mbps
		Region of Interest (ROI)	Supported
		Security	Password protection, complicated password, watermark, digest authentication for HTTP, WSSE and digest authentication for ONVIF,TLS 1.3
		Simultaneous Live View	Up to 6 channels
		Protocols	TCP/IP, UDP, Multicast, NTP, DDNS, SNMP, QoS, DHCP, IPv4, IPv6, DNS, HTTP, HTTPS, RTSP, SRTP/RTSPS, Bonjour, NAT, RTCP, UPnP, ONVIF, SSH, SMTP, ARP
		Wide Dynamic Range (WDR)	120 dB
		SNR	≥ 52 dB
		Day/Night Switch	Day, Night, Auto, Schedule
		Image Enhancement	BLC, HLC, 3D DNR
		Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
		Privacy Mask	Supported
		Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
		Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
		Linkage	Upload to FTP/SFTP, Send email, notify surveillance center, trigger capture
		Power	12 VDC ± 25%, 0.5 A, max. 6 W, PoE: IEEE 802.3af, Class 3, max. 7.2 W
		Material	Metalic Body
		Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
4	2 MP BULLET	General Function	Heartbeat, anti-banding, mirror, password protection, password reset via email
		Protection	IP67
		Image Sensor	1/2.9 inch Progressive Scan CMOS
		Max. Resolution	1920 × 1080
		Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
		Shutter Time	1/3 s to 1/100,000 s
		Day & Night	IR cut filter
		Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°
		Lens Type	Fixed focal lens 4 mm
		Focal Length & FOV	4 mm, horizontal FOV 83°, vertical FOV 44°, diagonal FOV 99°
		Lens Mount	M12
		Iris Type	Fixed
		Aperture	F1.6
		DORI	4 mm, D: 56 m, O: 22 m, R: 11 m, I: 5 m
		Supplement Light Type	IR,Up to 30 m
		Smart Supplement Light	Yes
		Main Stream	60 Hz: 30 fps (1920 × 1080, 1280 × 720)





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		Sub-Stream	60 Hz: 30 fps (640 × 480, 640 × 360)
		Third Stream	60 Hz: 1 fps (640 × 360)
		Video Bit Rate	32 Kbps to 8 Mbps
		Region of Interest (ROI)	supported
		Security	Password protection, complicated password, watermark, digest authentication for HTTP, WSSE and digest authentication for ONVIF, TLS 1.3
		Simultaneous Live View	Supported, Up to 6 channels
		Protocols	TCP/IP, UDP, Multicast, NTP, DDNS, SNMP, QoS, DHCP, IPv4, IPv6, DNS, HTTP,HTTPS, RTSP, SRTP/RTSPS, Bonjour, NAT, RTCP, UPnP, ONVIF, SSH, SMTP, ARP
		Wide Dynamic Range (WDR)	Digital WDR
		SNR	≥ 52 dB
		Day/Night Switch	Day, Night, Auto, Schedule
		Image Enhancement	BLC, HLC, 3D DNR
		Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
		Privacy Mask	Supported
		Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
		Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
		Linkage	Upload to FTP/SFTP, Send email, notify surveillance center, trigger capture
		Power	12 VDC ± 25%, 0.5 A, max. 6 W,Ø5.5 mm PoE: IEEE 802.3af, Class 3, max. 7.5 W
		Material	Metalic
		Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
		General Function	Heartbeat, anti-banding, mirror, password protection, password reset via email
5	2 MP DOME	Protection	IP67
		Image Sensor	1/2.9 inch Progressive Scan CMOS
		Max. Resolution	1920 × 1080
		Shutter Time	1/3 s to 1/100,000 s
		Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
		Day & Night	IR cut filter
		Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
		Lens Type	Fixed focal lens, 2.8 mm
		Focal Length & FOV	2.8 mm, horizontal FOV 103°, vertical FOV 56°, diagonal FOV 121°
		Lens Mount	M12
		Iris Type	Fixed
		Aperture	F1.6
		DORI	2.8 mm, D: 45 m, O: 18 m, R: 9 m, I: 4 m
		Supplement Light Type	IR , Up to 30 m
		Main Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720)
		Sub-Stream	50 Hz: 25 fps (640 × 480, 640 × 360)
		Third-Stream	50 Hz: 1 fps (640 × 360)
		Video Bit Rate	32 Kbps to 8 Mbps
		Region of Interest (ROI)	Supported



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		Security	Password protection, complicated password, watermark, digest authentication for HTTP, WSSE and digest authentication for ONVIF, TLS 1.3
		Simultaneous Live View	Up to 6 channels
		Protocols	TCP/IP, UDP, Multicast, NTP, DDNS, SNMP, QoS, DHCP, IPv4, IPv6, DNS, HTTP, HTTPS, RTSP, SRTP/RTSPS, Bonjour, NAT, RTCP, UPnP, ONVIF, SSH, SMTP, ARP
		Wide Dynamic Range (WDR)	Digital WDR
		SNR	≥ 52 dB
		Day/Night Switch	Day, Night, Auto, Schedule
		Image Enhancement	BLC, HLC, 3D DNR
		Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
		Privacy Mask	Supported
		Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
		Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
		Linkage	Upload to FTP/SFTP, Send email, notify surveillance center, trigger capture
		Power	12 VDC ± 25%, 0.5 A, max. 6 W, Ø5.5 mm PoE: IEEE 802.3af, Class 3, max. 7.2 W
		Material	Metallic Body
		Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
6	16 Ch NVR	General Function	Heartbeat, anti-banding, mirror, password protection, password reset via email
		Protection	IP67
		IP Video Input	16-ch
		Incoming Bandwidth	160 Mbps
		Outgoing Bandwidth	160 Mbps
		HDMI Output	1-ch, 4K (3840 × 2160)/30 Hz, 2K (2560 × 1440)/60 Hz, 1920 × 1080/60 Hz, 1600 × 1200/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz
		VGA Output	1-ch, 1920 × 1080/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz
		Two-Way Audio	1-ch, RCA
		Decoding Format	H.265/H.265+/H.264+/H.264
		Recording Resolution	12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF
		Synchronous playback	16-ch
		Decoding Capability	AI on: 1-ch@12 MP (30 fps)/2-ch@8 MP (30 fps)/4-ch@4 MP (30 fps)/8-ch@1080p (30 fps) AI off: 2-ch@12 MP (30 fps)/3-ch@8 MP (30 fps)/6-ch@4 MP (30 fps)/12-ch@1080p (30 fps)
		Stream Type	Video, Video & Audio
		Audio Compression	G.711ulaw/G.711alaw/G.722/G.726/AAC
		Remote Connection	128
		Network Protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SMTP, SNMP, NFS, iSCSI, SISTP, UPnP, HTTP, HTTPS
		Network Interface	1 RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface
		SATA	2 SATA interfaces
		Capacity	Up to 10 TB capacity for each HDD
		USB Interface	2 × USB 2.0,
		Alarm In/Out	04-Jan
		Power Supply	12 VDC, 3.3 A



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		Working Humidity	10% to 90%
7	32 Ch NVR	Facial Detection and Analytics	Face picture comparison, human face capture, face picture search
		Face Picture Library	Up to 16 face picture libraries, with up to 20,000 face pictures in total (each picture $\leq$ 4 MB, total capacity $\leq$ 1 GB)
		Facial Detection and Analytics Performance	1-ch human face capture
		Face Picture Comparison	4-ch face picture comparison alarm
		Human/Vehicle Analysis-IP Video input	32-ch
		Incoming Bandwidth	256 Mbps
		Outgoing Bandwidth	160 Mbps
		HDMI Output	1-ch, 4K (3840 $\times$ 2160)/30Hz, 2K (2560 $\times$ 1440)/60Hz, 1920 $\times$ 1080/60Hz, 1600 $\times$ 1200/60Hz, 1280 $\times$ 1024/60Hz, 1280 $\times$ 720/60Hz, 1024 $\times$ 768/60Hz
		VGA Output	1-ch, 1920 $\times$ 1080/60Hz, 1280 $\times$ 1024/60Hz, 1280 $\times$ 720/60Hz
		Audio Output	1-ch, RCA (Linear, 1 K $\Omega$ )
		Two-Way Audio	1-ch, RCA (2.0 Vp-p, 1 K $\Omega$ , using the audio input )
		Decoding Format	H.265/H.265+/H.264+/H.264
		Recording Resolution	12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF
		Synchronous playback	16-ch
		Decoding Capability	AI on: 1-ch@12 MP (30 fps)/2-ch@8 MP (30 fps)/4-ch@4 MP (30 fps)/8-ch@1080p (30 fps) AI off: 2-ch@12 MP (30 fps)/3-ch@8 MP (30 fps)/6-ch@4 MP (30 fps)/12-ch@1080p (30 fps)
		Stream Type	Video & Audio
		Audio Compression	G.711ulaw/G.711alaw/G.722/G.726/AAC
		Remote Connection	128
		Network Protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SMTP, SNMP, NFS, SISTP, UPnP, HTTP, HTTPS,ODDT
		Network Interface	2 RJ-45 10/100/1000 Mbps self-adaptive Ethernet interfaces
		SATA	4 SATA interfaces
		Capacity	Up to 10 TB capacity for each HDD
		Serial Interface	2 RS-485 (half-duplex), 1 RS-232
		Alarm In/Out	16 IN/4 OUT
		USB Interface	3 $\times$ USB 2.0,
		Power Supply	100 to 240 VAC, 50 to 60Hz
8	64 Ch NVR	IP Video Input	64-ch
		Incoming Bandwidth	400 Mbps
		Outgoing Bandwidth	400 Mbps
		HDMI OUT PUT	2 PORT- 8K (7680 $\times$ 4320)/30Hz, 4K (3840 $\times$ 2160)/60Hz, 4K (3840 $\times$ 2160)/30Hz, 2K (2560 $\times$ 1440)/60Hz, 1920 $\times$ 1080/60Hz, 1600 $\times$ 1200/60Hz, 1280 $\times$ 1024/60Hz, 1280 $\times$ 720/60Hz, 1024 $\times$ 768/60Hz
		VGA Output	2 PORT - 1920 $\times$ 1080/60Hz, 1280 $\times$ 1024/60Hz, 1280 $\times$ 720/60Hz, 1024 $\times$ 768/60Hz
		Video Output Mode	HDMI 1 and VGA 1 provide simultaneous video output, and work as the main output; HDMI 2 and VGA 2 provide simultaneous video output, and work as the auxiliary output
		Audio Input	1-ch, RCA (2.0 Vp-p, 1 K $\Omega$ )
		Audio Output	2-ch, RCA (Linear, 1 K $\Omega$ )



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		Two-Way Audio	Supported
		Decoding Format	H.265/H.265+/H.264/H.264+
		Recording Resolution	Upto 32 MP
		Synchronous playback	16-ch
		Decoding Capability	2-ch@32 MP (30 fps)/8-ch@8 MP (30 fps)/16-ch@4 MP (30 fps)/32-ch@1080p (30 fps)
		Audio Compression	G.711ulaw/G.711alaw/G.722/G.726/AAC/MP2L2/PCM
		Network Protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, ODDT, SMTP, SNMP, NFS, iSCSI, SISTP, UPnP, HTTP, HTTPS
		Smart Event	Support Multiple VCA and social camera smart functions-line crossing, intrusion detection, ANPR , Heat Map, People counting.
		Network Interface	2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface
		RAID Type	RAID0, RAID1, RAID5, RAID6, RAID10
		Serial Interface	1 RS-485 (full-duplex), 1 RS-232
		SATA	8 SATA interfaces supporting hot-plug
		e-SATA	1 e-SATA interface
		Capacity	Up to 16 TB capacity for each disk
		Alarm In/Out	16/9
		USB Interface	2 × USB 2.0; ,: 2× USB 3.0
		Power Supply	100 to 240 VAC, 50 to 60 Hz, redundant power supply
9	CAT 6		
S.NO.	Specification	UNIT	PARAMETERS
I	CABLE TYPE		CAT6 4P X 23 AWG UTP CABLE
II	APPLICABLE STANDARDS		ISO/IEC11801 ,ANSI/TIA-568-C.2,RoHS 2.0
III	CONDUCTOR		
a)	Material		Solid Bare Copper (99.90%)
b)	Size	AWG	23 AWG (0.55 ± 0.015 mm)
c)	Tensile Strength	Mpa	≥ 200
d)	Elongation	%	≥ 15 , over Insulation
IV	INSULATION		
a)	Material		Polyethylene (HDPE)
b)	Dia. Of insulation	mm	0.98 ± 0.05
c)	Tensile Strength Before Ageing	Mpa	>13.5
d)	Elongation at Break	%	≥ 300
V	PAIR FORMATION		
a)	Pairing		Twisted into Two core
b)	No. of pair	Nos.	4, each Pair twisted
VI	COLOR CHART		
	Pair #1		Orange-White with Orange
	Pair #2		Brown-White with Brown
	Pair #3		Blue-White with Blue
	Pair #4		Green-White with Green
VII	Pair Lay Length	mm	Pair 1= 18.0 mm Pair 2= 15.0 mm Pair 3 = 10.50 mm Pair 4= 12.30 mm
VIII	Overall Lay Length	mm	100
IX	OUTER SHEATH		
a)	Material		PVC- Polyvinyl Chloride
b)	Thickness	mm	0.50 ± 0.10
c)	Colour of outer sheath		Grey





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d)	Approximate Overall Diameter	mm	6.0 ± 0.30
e)	Tensile Strength Before Ageing	Mpa	>13.5
f)	Elongation at Break	%	≥ 150
g)	Ageing Period		100 Deg C x 24h x 10d
h)	Tensile Strength After Ageing	Mpa	>12.5
i)	Elongation at Break	%	≥ 125
j)	Cold Bend @ '-20 +/- 2 Deg C for 4h,8 x Cable O.D,		No Visible Cracks
k)	PVC Sheath Hardness@ 27 Deg C	Shore D	46 ± 2 as per ASTM- D 2240
X	Rip Cord		Yes
XI	Sequential Marking	Mtr	At Every Meter
XII	Cross Filler		HDPE Sepertor with size-4.4 mm
XIII	PACKING		
(a)	Material		305 Mtrs in Tangle Free box Packaging Dimension 400 mm (W) x 400 mm (H) x 210 (D)
b)	Cable Length (Tolerance with Individual length)	Mtr	305 ± 1.5
c)	Weight	Kg	12.3 ± 0.5
XIV	PHYSICAL CHARACTERSTICS		
a)	Installation Temperature	°C	0 to +50°C
b)	Storage Temperature	°C	-20 to +75°C
c)	Operating Temperature	°C	'-20 to +75°C
XV	ELECTRICAL PARAMETER		
a)	Conductor Resistance (DC)	Ω/100 Mtr	9.38 @20°c Max
b)	Resistance Unbalance	%	5 Max
c)	Mutual Capacitance	nF/100 Mtr	5.6 Max
d)	NVP	%	69
e)	Impedence @ ≤ 100 MHz	Ω	100 ± 15
	@ 100 -250 MHz	Ω	100 ± 25
f)	Operating voltage	V	60
g)	1.0-250.0 MHz delay skew	ns/100mtr	45 (max)
D	SMART BOARD		
1	Interactive Flat Panel		Make & Model - Any reputed brand with presence in Indian Market for at least 20years Diagonal Size - 65, 75, 86 "or Higher Resolution - 3840 x 2160 or more Brightness - Min 450nits (with glass) / 500nits (without glass) Panel Technology - IPS (Direct LED) Viewing Angle - 178 degree (H) / 178 degree (V) Dynamic Contrast Ratio - 30,000:1 or higher Color Depth - 10-bit or higher Response Time - 8 ms or less RAM - 8GB or higher ROM - 128GB or higher Input Ports (minimum) - HDMI-2, USB- 2, OPSSlot-1 Output Port - Audio Port -1



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		<p>External Control - RS-232, RJ-45 Operation Hour - 16 Hrs Life - Min 50,000 Hrs Wi-Fi - Wi-fi dongle to be provided along with IFP(Same brand preferred) Speaker - Built in Speaker (20 Wx2+16W Subwoofer) or higher Detection Method - IR Plug In USB web Cam - Compatible Pen - 2 Touch pens OS - Min Android 15.0 or better Certifications - BIS, FCC, CE/CB/UL/ROHS/ TUV Warranty – OEM 3 years Accuracy - 2mm or less Multi Touch Points - 50 Points or Higher Embedded Interactive White Board Software - PC Less Interactive White Board mode feature for teaching Interactive &amp; Important Features - Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar, Device Management System Built in System Processor - Dual Core Processor with 1.5GHz or higher Power Consumption (Max.) - 350W or less Operating Temperature - 00~400 Operating Humidity - 10~80% Accessories - 2 Pens, Power cable Installation - Wall mount IFP Should Support - PPT, Word, PDF, Image, Video play *Interactive Flat Panel with Google EDLA Certified Android 15 OS 8GB RAM   128 GB Internal Memory SGS Certified IP5X Dustproof TÜV certified eye care 65 W USB Type-C 50 Touch minimum Brightness: 350nits (with glass) / 400nits (without glass) Color Depth- 10 Bit Built in speaker: 56W (20 wx 2 + 16W Sub-Woofer) Built In Microphone. Hardness: 9H Thickness: Tempered, 3.2 mm Accessories (Standard)- Remote Control, Power Cord (by region), Touch pen, Quick Start Guide, Regulation Sheet, Touch Cable (USB to USB,) HDMI cable, VGA (D-sub 15pin) Cable, Type C Cable, Wall mount Optional Accessories: OPS- i5000 - i5, 12th Generation (Windows 11 Professional) OEM should have presence in Assam &amp; North East market from last 10years OEM must have presence in India for more than 20 years (Certificate of Incorporation required). The manufacturer must have minimum Annual Turnover of Rupees 400+ Crores OEM should have Survive centre in any state of the Seven Sister (states) for more than 10 years. OEM must have onsite service to entire North East OEM Should have BIS OEM Should have presence in more than 100 countries.</p>
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2	OPS	<p>Features - Specifications Processor - Intel Core i5 or better Processor Generation - 10th Generation or Better RAM - 8 GB DDR4 Storage - 1TB/ SSD Preferred Network Connectivity - 10/100/1000 on board Integrated Giga bit Port Bluetooth Connectivity - Yes USBPort2.0(Number) - Minimum 2 USBPort3.0(Number) - Minimum 2 HDMI Port (Number) - Minimum 1 DP Port - Minimum 1 LAN Port (Number) - 1 Audio In - 1 Audio Out - 1 On Site OEM Warranty - 3 Years to be Provided by IFP OEM OEM should have presence in Assam &amp; North East market from last 10years OEM must have presence in India for more than 20 years (Certificate of Incorporation required). The manufacturer must have minimum Annual Turnover of Rupees 400+ Crores OEM should have Survive centre in any state of the Seven Sister (states) for more than 10 years. OEM must have onsite service to entire North East OEM Should have BIS OEM Should have presence in more than 100 countries.</p>
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*Note : Enclose brochure wherever applicable*

**Signature, Name of Authorized Person of the Bidder with seal Date:**

**Place:**

**Contact Cell No. :**

**Email ID :**

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NNEXURE III

3. Financial Bid:

Sl No	Item Name	Rate	GST	Amount	Total Amount
I	<b>COLLEGE</b>				
A	<b>PRINCIPAL ROOM</b>				
1	Principal Desk				
2	Back Unit Storage				
3	High Back Chair				
4	Low Back Chair				
5	3 Seater Sofa				
6	1 Seater Sofa				
7	Center Table				
B	<b>VICE PRINCIPAL ROOM</b>				
8	Vice Principal Desk				
9	Arrow Back Unit Back Unit Storage				
10	Executive High Back Chair				
11	Executive Medium Back Chair				
12	3 Seater Sofa				
13	2 Seater Sofa				
14	Centre Table				
C	<b>ADMINISTRATIVE OFFICE</b>				
15	Director Desk				
17	Medium Back Chair				
18	Back Unit Storage				
19	Personal Locker				
D	<b>CLASS ROOM</b>				
20	Desk And Bench (1 Seater)				
21	Desk And Bench (2 Seater)				
22	Desk And Bench (3 Seater)				
23	Teacher's Desk				
24	Medium Back Mesh Chair				
25	White Board				
E	<b>CONFERENCE ROOM</b>				
26	U - Shape Modern Design Conference Table				
27	High Back Leatherette Chair				
28	Low Back Leatherette Chair				
F	<b>OFFICE ROOM</b>				
29	Office Table				
30	Medium Back Mesh Chair				
31	Steel Glass Door Almirah				
32	Medicine Shelf				
33	Shelf (Book Rack)				
34	Reception Desk				
35	Bag deposit Counter				
G	<b>LIBRARY</b>				
36	Library Table				
37	One Side Book Shelf				
38	Visitor Chair				
39	OPAC Table				
40	Periodicals				
41	Double Sided Open Rack				
H	<b>COMPUTER ROOM</b>				





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42	Computer Room Workstation				
<b>I</b>	<b>STAFF ROOM</b>				
43	12 Seater Meeting Table				
<b>J</b>	<b>LAB</b>				
44	Wall Lab Table				
45	Lab Stool				
46	Drawing tables				
<b>K</b>	<b>AUDITORIUM</b>				
47	Auditorium Chair				
48	Lectern				
<b>L</b>	<b>CAFETERIA</b>				
49	Cafeteria Table				
50	Cafeteria Chair				
<b>M</b>	<b>HOSTEL</b>				
51	Wood Bed				
52	Metal Bed				
53	Wardrobe				
54	Study Table				
55	Chairs				
56	Visitor Chair				
57	Cafeteria Table				
58	Cafeteria Chair				
59	Sofa (1 seater)				
60	Sofa (2 seater)				
61	Sofa (3 seater)				
62	Center Table				
63	Dining Set				
64	Side table				
65	Almirah				
<b>II</b>	<b>LAB EQUIPMENT</b>				
<b>A</b>	<b>ZOOLOGY DEPT</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Microscope				
2	Upright LED Binocular Microscope				
3	Slides				
4	Cover Slides				
5	Hot Air Oven (Digital)				
6	Tray (Enamel)				
7	Measuring cylinder				
8	Pippet				
9	Conical Flask				
10	Beaker				
11	Beaker				
12	Beaker				
13	Pretidish				
14	Watch glass				
15	Glass jar				
16	Forceps				
17	Scissors				
18	Test Tube Brush				
19	Needle (Descanting)				
20	Cotton				
21	Heating plate (Hot plate)				
22	Museum bottle				
23	Thermometer (0-2200)				
24	Water bath				



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25	Digital Thermometer				
26	Cyclometer				
27	Digital Colorimeter				
28	Nano Drop One Spectrophotometer with all accessories				
29	Digital pH meter				
30	Weighing Machine- Digital				
31	Turbidometer				
32	Price Label Printer				
33	2HP Vegetable Cutting Machine				
34	Dry Fruit Cutting Machine With				
35	Cabinet Dryer - 50 ltrs, Electric				
36	Vacuum Sealer				
37	Dry Grinder				
38	Autoclave				
39	Laminar Air Flow				
40	Manual Humidifier				
41	Inverted Air Conditioner				
42	BOD Incubator-				
43	Boiler Water Electric				
44	Double Door Refrigerator Frost Free.				
45	5 Part Hematology Analyzer				
46	Fully Automated Biochemistry Analyzer				
47	Elisa Reader & Washer				
48	High Sped Programmable Centrifuge				
49	Atomic Absorption Spectrophotometer with 16 lamps- Hg, Fe, Na, K, Ar, Ur, Se, Te, Bi, Sn, Cr, Cl, Pb, Mb, Zn, Si				
50	HPLC system				
51	Ultrapure Tap to Type I/II Water Purification System with Touch Smart Dispenser with all accessories				
52	Colony Counter (Digital) with Marker pen for Digital counting				
53	Trinocular microscope				
54	Incubated/Refrigerated Shaker				
55	CO2 incubator - cycle 184 L with cylinder				
56	Inverted Microscope				
<b>B</b>	<b>BOTANY DEPT</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Upright LED Binocular Microscope				
2	Microscope				
3	Binocular Microscope LED with camera				
4	Hot Air Oven (Digital)				
5	Distiller				
6	Permanent Slides (Common)				
7	Conical Flask				
8	Measuring cylinder				
9	Beaker				
10	Beaker				
11	Simple Slides				
12	Specimens Bottle				
13	Blades				
14	Test Tube Brush				
<b>C</b>	<b>CHEMISTRY DEPT</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Melting point apparatus				
2	Hot Plate for culture media preparation				



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3	Water bath (12 holes)			
4	Heating mental 500ml with E/R			
5	Porcelain dish 3"			
6	Digital Thermometer			
7	Reagent bottle			
8	Burette			
9	Pipette (5ml/10ml/25ml)			
10	Digital melting point			
11	Glass condenser			
12	Rotor/Shaker			
13	Bunsen burner			
14	Hot Air Oven (Digital)			
15	Conical flask (250ml)			
16	Beaker funnel			
17	Beaker funnel			
18	Test tube Holder S.S (Stainless steel)			
19	Bunsen Burner brass C.P without stop cock			
20	Spirit Lamp Brass : Superior Quality 4Oz			
21	Tripod Stand Z.P Legs Round Top: size 6"x4"			
22	Tripod Stand Z.P Legs Round Top: size 7"x4"			
23	Tripod Stand Z.P Legs Round Top: size 8"x4"			
24	Wire Gauge :with Double . Asbestos 14x 14cm			
25	Test tube Brush : Nylon ( 50pcs x lbox) size- 6"			
26	Test tube Brush: Nylon ( 50pcs x lbox) size- 7"			
27	Test tube Brush: Nylon ( 50pcs x lbox) size- 8"			
28	Test tube Brush : Nylon ( 50pcs x lbox) size- 9"			
29	Test Tube Brush semi Micro Size : 6" for H.Meter			
30	Bottle Brush: Nylon (50pcs x lbox), size- 12"			
31	Bottle Brush: Nylon (50pcs x lbox) , size- 15"			
32	Bottle Brush: Nylon (50pcs x lbox), size- 18"			
33	Bottle Brush: Nylon (50pcs x lbox) , size- 24"			
34	Pipette Brush, size:20			
35	Flask Brush: Nylon			
36	Test tube Brush : hair size : 8"( 50pcs pack)			
37	Bottle Brush: hair ( 50pcs x lpack), size- 12"			
38	Bottle Brush: hair ( 50pcs x lpack), size- 15"			
39	Bottle Brush: hair ( 50pcs x lpack), size- 18"			
40	Petri Dish Box S.S Jointed: for 4" petri Dish			
41	Petri Dish Box S.S Joint less : for 4" petri Dish			
42	Copper Turning (500gms x 1pkt)			
43	Iron Filling (100gms x pkt)			
44	Iron Filling (250gms x pkt)			
45	Iron Filling (500gms x pkt)			
46	Deep form Basins with Spout, cap. - 170ml			
47	Filter paper Circle: 'A' Grade Box in 100 circles, size - 12.5cms			
48	Litmus Paper Book Red/ Blue Dr. Watts			
49	Lead Acetate Starch Iodide T.Paper			
50	Platinum Wire			
51	Watch Glasses: size - 3"			
52	Test Tube Stand: 6 holes Teak wood			
53	Basins (china Dish), size- 60mm			
54	Rubber tubing, size 5mm			
55	Beakers Low Form, size- 250ml			
56	Conical flasks, size - 250ml			



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57	Flat Bottom Flask , size- 250ml				
58	Round Bottom Flask, size- 250ml				
59	Volumetric Flasks Stoppard, size- 250ml				
60	Funnel's 60 Angle plain, dia- 6.25cm				
61	Gas generating Kipps Apparatus, size- 1000ml				
62	Measure Glass: Graduated, size- 100ml				
63	Measure Cylinder : Graduated, size- 100ml				
64	Test tubes Borocillicate Glass, size- 15mm x 150mm				
65	Burette with Glass : stop cock screen printing, size- 100ml				
66	Volumetric Flasks Borocillicate, size - 250ml				
67	Funnel Borocillicate Glass, size - 3"				
68	Pipette Graduated B/ Glass, size - 25ml				
69	Beakers B/Glass Graduated , size 100ml				
70	Beakers B/Glass Graduated , size 250ml				
71	Conical flask B/Glass, size - 250ml				
72	Round Bootom Flask Borocillicate Glass, size- 250ml				
73	Flat Bottom flask Borocillicate glass, size-250ml				
74	Borocillicate Tubes from 6mm to 68mm				
75	Borocillicates rods from 5m to 16mm				
76	Measuring Spoon, size 1.25ml, 2.5ml, 5ml, 15ml				
<b>D</b>	<b>PHYSICS LAB</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Vernier Calipers				
2	Screw gauge				
3	Physical balance				
4	Lenses				
5	Mirror				
6	Optical bench				
7	P O Box (6 dials)				
8	Battery eliminator				
9	Ammeter				
10	Voltmeter				
11	Copper wire				
12	Galvometers				
13	One way key				
14	Bar Pendulum (Compound )				
15	Kater's pendulum (S.S)				
16	Stop clock				
17	Thermometer (1/10C)				
18	Meter Scale				
19	Dip circle				
20	Travelling microscope				
21	Glass beakers				
22	Glass beakers				
23	Meter bridge				
24	Standard resistance				
25	Resistance box				
26	Rheostat				
27	Potentiometer				
28	Glass slab				
29	Momarti of incitia (table)				
30	Rigidity modulus				
31	Lycopodium Powderer				





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32	Digital Electrical Balance 500gms (CAH 503/Contech)			
33	Reading Telescope			
34	Meter Telescope ( 1meter long )			
35	Calliper vernier: 5" C.P with Wheel			
36	Calliper vernier: 5" S. Steel with Wheel			
37	Callipers Vernier: I.M.E Type in velvet case			
38	Callipers Vernier: Demonstration Model			
39	Macro Screw Guage : pitch $\frac{1}{2}$ mm size: 15mm			
40	Macro Screw Guage : pitch $\frac{1}{2}$ mm size: 20mm			
41	Macro Screw Gauge : pitch $\frac{1}{2}$ mm size : 25mm			
42	Cubes of Metal (1cm)			
43	cubes of Metal (2cm)			
44	Pendulum Bob of different Metal $\frac{1}{2}$ " (12mm)			
45	pendulum Bob of different Metal $\frac{3}{4}$ " (18mm)			
46	pendulum bob of different metal 1" (25mm)			
47	Battery Hydrometer			
48	Spirit Level : plastic size 6" (15cm)			
49	Boyle's Law Appts. w/o R. Tubing and Mercury			
50	Barometer Digital cum Altimeter / compass			
51	Rain Gauge 12" long 5" Dia G.I Sheet			
52	Victor Mayer's Apps : B/Glass w/out Jacket			
53	Bending of Beam Apparatus			
54	Torsion Pendulum : 12.5cm dia			
55	Pulley Arrangement			
56	Simple Pendulum			
57	Young's Modulus Appts. Iron with Weight			
58	Glass Prism			
59	Prism :25 x 25mm H.T - Borocilicate Crown Glass			
60	Prism :25 x 25mm H.T - Dense Flint Glass Prims			
61	Prism : 25 x 25mm H.T - Extra Dense Flint Glass Prism			
62	Prism :25 x 25mm H.T - Dbl. E.D.F Glass Prism			
63	Hollow Glass Prism with Stoppered- size 38 x 38x 25 mm			
64	Hollow Glass Prisms 38x 38mm			
65	Hollow Glass Prisms 50x 50mm			
66	Convex lens - Dia 2" with focal length 5 to 6 cms			
67	Convex lens - Dia 2" with focal length 10 cms			
68	Convex lens - Dia 2" with focal length 15cms			
69	Convex lens - Dia 2" with focal length 20 to 100cms			
70	concave lens - Dia 2" with focal length 5 to 6cms			
71	Concave lens - Dia 2" with focal length 10 cms			
72	Concave lens - Dia 2" with focal length 15 cms			
73	Concave lens - Dia 2" with focal length 20 to 100cms			
74	Turning Forks: C.P Set of 8 in Box			
75	Magnetic Field Apparatus			
76	Simple cell ( Voltaic Cell) with Complete Set			
77	Galvanometer with Stand DC 30-0-30			
78	Am - meter with stand DC 1.5to 10 Amp			
79	Potionometer : 4 wires college quantity			
80	OHM'S Law Appts .with Rheostat and DC Meter			
81	Rheostat: 4.3cm ( $1\frac{3}{4}$ ) dia tube Amps. 8.0 to 4.0 - size 15cm			
82	Commutators : round four way plug key			



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83	Daniel Cell substitutes				
84	Step down Transformers: input 220V, output: 12V AC 1Amp				
85	Wash Bottles 1000ml				
86	Specimen Jar 50mm x150mm				
87	Pipette stand for 94 pipettes				
88	cynlinders 100ml				
89	cynlinders 500ml				
90	cynlinders 1000ml				
91	Experimental Tables L x B x H (6ft x 4ft x 3ft)				
92	Experimental Tables L x B x H (5ft x 3ft x 2.8ft)				
93	Experimental Tables L x B x H (4ft x 3ft x 2.8ft)				
94	Wooden Sitting Stools 1.3ft x 1ft x 2ft				
95	Sonumeter				
96	Cathometer				
97	Sodium vapour lamp				
98	Mercury vapour lamp				
99	Photo cell				
100	Torsion Balance				
101	Torsion Pendulum				
102	Laser Trainer Kit				
103	Optical Bench				
104	Plane Diffracting Grating				
105	Plane Glass Plates				
106	Bi-Prism				
107	Digital Multimeter				
108	Digital Electrical Balance				
109	Frequency Generator				
110	Galvanometer				
111	Slotted Weights				
112	Condensing lens				
113	Bar Magnet				
114	Slide Callipers				
115	Pulley arrangements				
116	Digital Barometer cum Altimeter				
117	Resistors				
118	Capacitors				
119	Inductors				
120	Voltmeter				
121	Ammeter				
122	Battery (Eliminator)				
123	Clamp				
124	Rubber pad				
125	Paper Rider				
126	Weights Hanger/Hook				
127	Magnetic Compass needles				
128	Drawing Boards				
129	Fixing Pins				
130	Connecting Wires				
131	Meter Scales				
<b>E</b>	<b>FABRICATION</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Stick Welding				



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2	Measuring Tape				
3	Wire Cutter				
4	Stainless Steel Ruler				
5	Pliers				
6	Screw Drivers				
7	Welding Gloves				
8	Head Gear				
9	Clear Face Shield				
10	Welding Goggles				
11	Planner				
12	Oxygen gas with cylinder				
13	Acetyline gas with cylinder				
14	Hose pipe for Acetyline (50Mtr)				
15	Hose pipe for Oxygen (50Mtr)				
16	Oxy-acetyline welding torch				
17	Pressure regulator with valve (O2 and Acetylin)				
18	Electrode				
19	Filler rod (Kg)				
20	Leather Apron				
21	Wire brush				
22	MS Flat				
23	MS Flat				
24	Metal working table				
25	Hand shield				
26	Filter glass				
27	Transparent glass				
28	Welding cable (100Mtr)				
29	Electrode holder for arc welding				
30	Gas cutting torch				
31	Steel Almirah				
F	CLAY MODELLING	Rate	GST	Amount	Total Amount
1	Model Casting				
2	Wet Plaster Casting				
3	Clay Modelling Tool Set				
G	DESIGN STUDIO	Rate	GST	Amount	Total Amount
1	Plotter				
2	Drafting Table				
3	Projector & Motorised Screen				
4	Interactive Flat Panel				
5	Laser Cutter				
H	CIVIL TEST LAB	Rate	GST	Amount	Total Amount
1	Slump Cone				
2	Steel Tape				
3	Dumpy Level with Tripod Stand				
4	Levelling Staff				
5	Theodolite				
6	Trowel				
7	Shovel				
8	Steel Float				
9	Steel Plate				
I	CARPENTRY	Rate	GST	Amount	Total Amount
1	Hacksaw				
2	Jack Plane				
3	File (with different type)				
4	Chisel (with different type)				



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5	Puncher (Set wise)				
6	Pressure Measurement Gauge				
7	Semi Protractor				
8	Snipe Cutter				
9	Measuring Tape				
10	Metal Pliers				
11	Steel Ruler				
12	Steel Ruler				
13	Tri-Square				
14	Clamper				
15	Allen Key (Set wise)				
16	Spanner				
17	Hammer				
18	Hand Driver				
19	Screw Driver				
20	Saw				
21	Anvil				
22	Bench vice Cross rib 125mm jaw width, Fixed base				
23	Drill bit: Jobber series ( 1mm to 13mm) set of 25				
24	Digital vernier calipper (inside/outside type) : 0-300mm				
25	Digital vernier calipper: 150mm				
26	Digital vernier calipper: 200mm				
27	Digital vernier calipper 0 -300mm				
28	Screw micrometer				
29	Screw Micrometer (Outside micrometer) Digital				
30	Dressed scantling pine (6' x 2half" x 1 half)				
31	Bevle chisel with handle 1"				
32	Mortize Chisel 4PC box pack				
33	Try square pack of 4 box pack				
34	Marking gauge				
35	Mallet				
36	Tenor saw				
37	Oil stone for sharpening				
38	Triangle saw file pack of 3 box pack				
<b>J</b>	<b>SURVEY LAB</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	PRISMATICCOMPASS WITH TRIPOD				
2	PLANE TABLE WITH WOODEN STAND AND ACCESSORIES BOX				
3	MEASURING TAPE (Non Metallic)- 30M				
4	DUMPY LEVEL				
5	VERNIER TRANSIT TEODALITE WITH STAND				
6	GHAT TRACER C With pole and target				
7	CLINOMETER				
8	PLANIMETER				
9	BOX SEXTANT				
10	HAND LEVEL				
11	PENTAGRAPH				
12	TOTAL STATION				
<b>K</b>	<b>FITTING SHOP</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	MS Flat				
2	Steel Rule				
3	Double end Scriber				
4	Centre Punch				





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5	Flat file (Bastard /2nd Cut / Smooth)				
6	Triangle file (Bastard /2nd Cut / Smooth)				
7	Metal Drill bit Taper shank				
8	Metal Drill bit Straight shank				
9	Metal Drill bit Straight shank				
<b>L</b>	<b>MACHINES LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Power Quality Analyzer (MI 2884 EU/ Matrel)				
2	M.G Set (Dc Shunt Motor + Dc Shunt Generator)				
3	DC Shunt Motor				
4	DC Series Motor				
5	M.G Set (Dc Series Motor + Dc Series Generator)				
6	M.M Set (3-Ø SRIM + DC Shunt Motor)				
7	M.G Set (3-Ø Ac Generator + Dc Shunt motor)				
8	3 ØAuto Synchronous Motor				
9	1 -Ø Induction Motor				
10	3 -Ø Auto Synchronous Motor + 3ø Ac Generator				
11	3 -Ø Slip Ring Induction Motor				
12	3 -Ø Squirrel Cage Induction Motor				
13	1- Ø Transformer				
14	3 -Ø Transformer				
15	Rectifier I/P 440V AC 3-Ø 50Hz, O/P 220V DC, 100A (PowerTronix)				
16	Squirrel Cage Induction Motor 2HP				
17	DC Shunt Motor 2HP				
18	Synchronous Machine Training System Comprising of 2 MG Set includes				
i	3-Ø AC Alternator 3HP -2 Nos				
ii	AC & DC Measurements Unit Panel				
19	Shunt motor Coupled to Synchronous Machine includes 5Hp DC Shunt Motor & 3 HP Generator				
20	Steel rule in English & Metric unit				
21	Steel rule in English & Metric unit				
22	Outside spring calipper				
23	Inside spring calipper				
24	Cold octagonal chisel flat				
25	Flat file bastard				
26	Flat file 2nd cut				
27	Flat file smooth				
28	Engineer's screw driver, Flat, Philips head, 2-in-1 , with transparent Green & opaque, as mfrs standard.				
29	Combination plier with joint cutter Insulated with thick CA Sleeve. Confirming to IS				
30	Eye safety glass				
31	Engineer's Try square				
32	Plain round bar, minimum order of one standard length. Small length cutting charge extra Rs.50.00 per cut				
33	Ball pein hammer with handle, generally confirming to IS 841-1983				
34	Allen hexagonal key Set of 9 (Box Packing)				
35	Adjustable spanner				
36	Oil can hand lever pressure feed				
37	HSS Tool bit				
38	HSS Tool bit				
39	Twist drill				
40	Big drill chuck with taper shank				



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41	Knurling cutter Diamond Knurling Tool GV with holder				
42	Surface gauge				
43	Engineer's Bench vice for Machinist with DoveTailn Guide ways				
44	Heavy wooden working table for bench vice				
45	Digital vernier calipper: Model 3747				
46	Digital vernier calipper				
47	Digital vernier calipper				
48	Screw micrometer (Outside micrometer)				
49	Boring tool bit with holder: Offer Straight Shank Boring Tool Kit				
50	Taper gauge				
51	Water based coolant for lathe machine				
52	Hacksaw frame:				
53	Hacksaw frame Pistol Grip Black powder coated Bow with plastic blue handle, nickel plated pairs with blade fitted .				
54	Factory gloves				
55	Angle grinder machine				
<b>M</b>	<b>CONCRETE LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	AIM-394				
2	AIM-390				
3	AIM 400				
4	AIM 401				
5	AIM 314E-DG-1				
6	AIM-337				
7	AIM 334				
8	AIM-335				
9	AIM-332				
10	AIM-455				
11	AIM-9107				
12	AIM-453				
13	AIM-046				
14	AIM-054-1				
15	AIM-05401				
16	AIM-05107				
17	AIM-05108				
18	AIM-05110				
19	AIM-05112				
20	AIM-05117				
21	AIM-05119				
22	AIM-05139				
23	AIM-05123				
24	AIM-05126				
25	AIM-05128				
26	AIM-05136				
27	AIM -05129				
28	AIM-05130				
29	AIM-05138				
30	AIM-05131				
31	AIM-05137				
32	AIM-05150				
33	AIM-05227				
34	AIM-05202				



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35	AIM-05203				
36	AIM-05204				
37	AIM-05206				
38	AIM-05208				
39	AIM-05211				
40	AIM-05235				
41	AIM-05217				
42	AIM-05219				
43	AIM-05221				
44	AIM-05222				
45	AIM-05236				
46	AIM-05224				
47	AIM-05233				
48	AIM-05237				
49	AIM-05250				
50	AIM -05337				
51	AIM -05302				
52	AIM -05306				
53	AIM -05307				
54	AIM -05309				
55	AIM -05310				
56	AIM -05311				
57	AIM -05312				
58	AIM -05314				
59	AIM -05315				
60	AIM -05317				
61	AIM -05319				
62	AIM -05339				
63	AIM -05322				
64	AIM -05323				
65	AIM -05326				
66	AIM -05327				
67	AIM -05328				
68	AIM -05329				
69	AIM -05350				
70	AIM -460				
71	AIM -481				
72	AIM-48101				
73	AIM-48103				
74	AIM-408-2				
75	AIM -374-1-DG				
76	AIM -403				
77	AIM -340				
78	AIM -338				
79	AIM -336				
80	AIM-372-DG				
81	AIM 373-DG				
N	SOIL TESTING LABORATORY	Rate	GST	Amount	Total Amount
1	AIM 031				
2	AIM-036-1				
3	AIM-037-1				
4	AIM-040				
5	AIM-041				
6	AIM-9831-1				
7	AIM 042-3				



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8	AIM-045			
9	AIM-046			
10	AIM - 05101			
11	AIM - 05106			
12	AIM - 05107			
13	AIM - 05108			
14	AIM - 05110			
15	AIM - 05112			
16	AIM - 05115			
17	AIM - 05121			
18	AIM-05124			
19	AIM-05128			
20	AIM-05136			
21	AIM-05130			
22	AIM-05138			
23	AIM-05134			
24	AIM-05150			
25	AIM-05227			
26	AIM-05202			
27	AIM-05203			
28	AIM-05204			
29	AIM-05205			
30	AIM-05206			
31	AIM-05211			
32	AIM-05213			
33	AIM-05214			
34	AIM-05219			
35	AIM-05222			
36	AIM-05224			
37	AIM-05242			
38	AIM-05226			
39	AIM-05250			
40	AIM-05337			
41	AIM-05302			
42	AIM-05303			
43	AIM-05304			
44	AIM-05312			
45	AIM-05317			
46	AIM-05318			
47	AIM-05319			
48	AIM-05326			
49	AIM-05327			
50	AIM-05328			
51	AIM-05329			
52	AIM-05350			
53	AIM-054-1			
54	AIM-05401			
55	AIM-074-1			
56	AIM-095-1			
57	AIM-079			
58	AIM-104			
59	AIM 108-1			
60	AIM-110-MS			
61	AIM-111-MS			
62	AIM-114-1			





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63	AIM-115-1				
64	AIM-120				
65	AIM-131				
66	AIM-11002				
67	AIM-11102				
68	AIM-133				
69	AIM-02402				
70	AIM-134				
71	AIM-02402				
72	AIM-15716				
73	AIM-15717				
74	AIM-15718				
75	AIM-161				
76	AIM-162				
77	AIM-162-1				
78	AIM-9108				
<b>O</b>	<b>MATERIAL TESTING LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	AIM 317E-DG-1				
2	AIM-33204				
3	AIM 334				
4	AIM-337				
5	AIM-339				
6	AIM-340				
7	AIM 344				
8	AIM-347				
9	AIM-348				
10	AIM 349				
11	AIM 364				
12	AIM 373-DG				
13	AIM-388				
14	AIM-390				
15	AIM 400				
16	AIM-418-2				
17	AIM 414				
18	AIM-434-1				
19	AIM-424				
20	AIM-426				
21	AIM-664				
22	AIM-665				
23	AIM-670				
<b>P</b>	<b>HYDRAULIC LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	AIM-HY1				
2	AIM-HY2				
3	AIM-HY3				
4	AIM-HY4				
5	AIM-HY5				
6	AIM-HY6				
7	AIM-HY7				
8	AIM-HY8				
9	AIM-HY9				
10	AIM-HY11				
11	AIM-HY12				
12	AIM-HY13				
13	AIM-HY14				
14	AIM-HY15				



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15	AIM-HY16				
16	AIM-HY17				
<b>Q</b>	<b>HIGHWAY LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	AIM-9933				
2	AIM-339				
3	AIM-455				
4	AIM-456				
5	AIM-457				
6	AIM-458-1				
7	AIM-48103				
8	AIM-511				
9	AIM-50810				
10	AIM-512-1				
11	AIM 515				
12	AIM-518				
13	AIM-52610				
14	AIM-52611				
15	AIM-561-2				
16	AIM-56110				
17	AIM-56301				
18	AIM-565-1				
19	AIM-566-3-AN				
<b>R</b>	<b>MICROPROCESSOR AND MICROCONTROLLER LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Microprocessor Trainer Kit 8085				
2	Stepper motor				
3	Stepper motor controller (Card)				
4	Microcontroller Trainer Kit 89C51				
5	DAC Interfacing Module				
6	Micro controller flash programmer				
7	Microcontroller - LED Interface Module				
<b>S</b>	<b>BASIC ELECTRONICS LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Digital storage oscilloscope :-DSO-025C2 -25M Hz				
2	Cathode Ray Oscilloscope EZ 20 MHZ				
3	Function generator (3MHz)				
4	DC Regulated power supply:- (Multi output) 0-30V, 2A				
5	Function generator (5MHz)				
6	Rheostat-1K $\Omega$ ,1/2A [Stead]				
<b>T</b>	<b>BASIC ELECTRICAL LABORATORY</b>	<b>Rate</b>	<b>GST</b>	<b>Amount</b>	<b>Total Amount</b>
1	Electrical Safety Trainer				
2	Electrical Wiring Training System				
3	Insulation Megger				
4	DP Switch Fuse Unit 16 A, 240 V				
5	Multimeter analog				
6	Multimeter digital				
7	Soldering Iron,65W				
8	Repairing of Switchboard				
9	Auto-Transformer				
10	Auto-Transformer				
11	Rheostat				
12	Rheostat				
13	Inductor				
14	Capacitor				
15	AC Ammeter				



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16	AC Ammeter				
17	AC Ammeter				
18	DC Ammeter				
19	DC Ammeter				
20	DC Ammeter				
21	DC Ammeter				
22	Digital Multimeter				
23	Wattmeter				
24	Wattmeter				
25	Wire				
26	Wire				
27	Transformer				
28	Transformer				
29	Flourosence				
30	Frame				
31	Tube Choke				
32	Starter				
33	Oscilloscope LCD				
34	Digital Storage Oscilloscope				
35	Clamp-on Meter				
36	DC Regulated Power Supply				
37	KVL				
38	KCL				
39	Thevenin's				
40	Norton's				
41	Ohm's Law				
42	Maximum Power Transfer				
U	CONTROL AND SIMULATION LABORATORY	Rate	GST	Amount	Total Amount
1	Synchro Transmitter Receiver Pair				
2	Linear Variable Differential Transformer (LVDT)				
3	MATLAB				
4	PSPICE				
V	MEASUREMENT LABORATORY	Rate	GST	Amount	Total Amount
1	Digital handheld Lux				
2	Flux Meter				
3	Decade Capacitor box				
4	Bridge Wheatstone				
5	Current transformer				
6	Potential Transformer				
7	Magnetic Standard				
8	Phase shifting Transformer				
9	Potentiometer Crompton				
10	Potentiometer Slide wire				
11	Infrared Thermometer				
12	Ordinary Thermometer				
13	Cathode ray Oscilloscope				
14	DC Regulated Power supply				
15	Single Phase Energy Meter				
16	Electric Heater				
17	Inductance Meter				
18	Standard Solenoid				
19	Conductor Clamp				
20	Three Phase & Single Phase Auto Transformers				
21	Three Phase & Single Phase Wattmeters				
W	POWER ELECTRONIC LABORATORY	Rate	GST	Amount	Total Amount



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1	Single phase SCR bridge converter with R, RL load			
2	TRIAC Characteristics model, PE-04			
3	MOSFET Characteristics model, PE-02			
4	SCR Parallel Inverter module, MODEL-PEC14M7			
5	Commutation Circuit Module (Chopper) MODEL-14M14CH# 2			
6	Fixed D.C. Power Supply Model-PD-01			
7	Function generator			
8	DC regulated power supply (multi output) 0-30 V, +/-5V,+/-12V-			

III IT EQUIPMENT

A	COMPUTER SYSTEM	Rate	GST	Amount	Total Amount
1	Laptop 1				
2	Laptop 2				
3	Laptop 3				
4	Desktop 1				
5	Desktop 2				
6	Laser Printer 1				
7	Laser Printer 2				
8	Laser Printer 3				
9	Inktank printer 1				
10	Inktank printer 2				
11	1kVA/800W Online UPS with 30 minutes backup				
12	1kVA/800W Online UPS with 60 minutes backup				
13	1kVA/800W Online UPS with 120 minutes backup				
14	2kVA/1600W Online UPS with 30 minutes backup				
15	2kVA/1600W Online UPS with 60 minutes backup				
16	2kVA/1600W Online UPS with 120 minutes backup				
17	3kVA/2400W Online UPS with 30 minutes backup				
18	3kVA/2400W Online UPS with 60 minutes backup				
19	3kVA/2400W Online UPS with 120 minutes backup				
20	5kVA/5000W Online UPS with 30 minutes backup				
21	5kVA/5000W Online UPS with 60 minutes backup				
22	5kVA/5000W Online UPS with 120 minutes backup				
23	6kVA/6000W Online UPS with 30 minutes backup				
24	6kVA/6000W Online UPS with 60 minutes backup				
25	6kVA/6000W Online UPS with 120 minutes backup				
26	10kVA/10000W Online UPS with 30 minutes backup				
27	10kVA/10000W Online UPS with 60 minutes backup				
28	10kVA/10000W Online UPS with 120 minutes backup				
29	10kVA/10000W Online UPS with 30 minutes backup				





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30	10kVA/10000W Online UPS with 60 minutes backup			
31	15kVA/15000W Online UPS with 30 minutes backup			
32	15kVA/15000W Online UPS with 60 minutes backup			
33	20kVA/20000W Online UPS with 30 minutes backup			
34	20kVA/20000W Online UPS with 60 minutes backup			
35	10kVA/10000W Online UPS with 30 minutes backup			
36	10kVA/10000W Online UPS with 60 minutes backup			
37	15kVA/15000W Online UPS with 30 minutes backup			
38	15kVA/15000W Online UPS with 60 minutes backup			
39	20kVA/20000W Online UPS with 30 minutes backup			
40	20kVA/20000W Online UPS with 60 minutes backup			
41	30kVA/30000W Online UPS with 30 minutes backup			
42	30kVA/30000W Online UPS with 60 minutes backup			
43	40kVA/40000W Online UPS with 30 minutes backup			
44	40kVA/40000W Online UPS with 60 minutes backup			
45	60kVA/60000W Online UPS with 30 minutes backup			
46	60kVA/60000W Online UPS with 60 minutes backup			
47	60kVA/60000W Online UPS with 60 minutes backup			
48	100kVA/100000W Online UPS with 60 minutes backup			
<b>B</b>	<b>NETWORKING</b>			
1	Switch PoE 16 port			
2	Switch PoE 24 port			
3	Switch PoE 48 port			
4	SERVER			
5	Wifi Access Point			
6	Hardware Controller			
<b>C</b>	<b>SECURITY CAMERA</b>			
1	6 MP VF BULLET CAMERA			
2	4 MP BULLET			
3	4 MP DOME			
4	2 MP BULLET			
5	2 MP DOME			
6	16 Ch NVR			
7	32 Ch NVR			
8	64 Ch NVR			
9	CAT 6			
<b>D</b>	<b>SMART BOARD</b>			
1	Interactive Flat Panel 65"			
2	Interactive Flat Panel 75"			
3	Interactive Flat Panel 86"			



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4	OPS				
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**Note:**

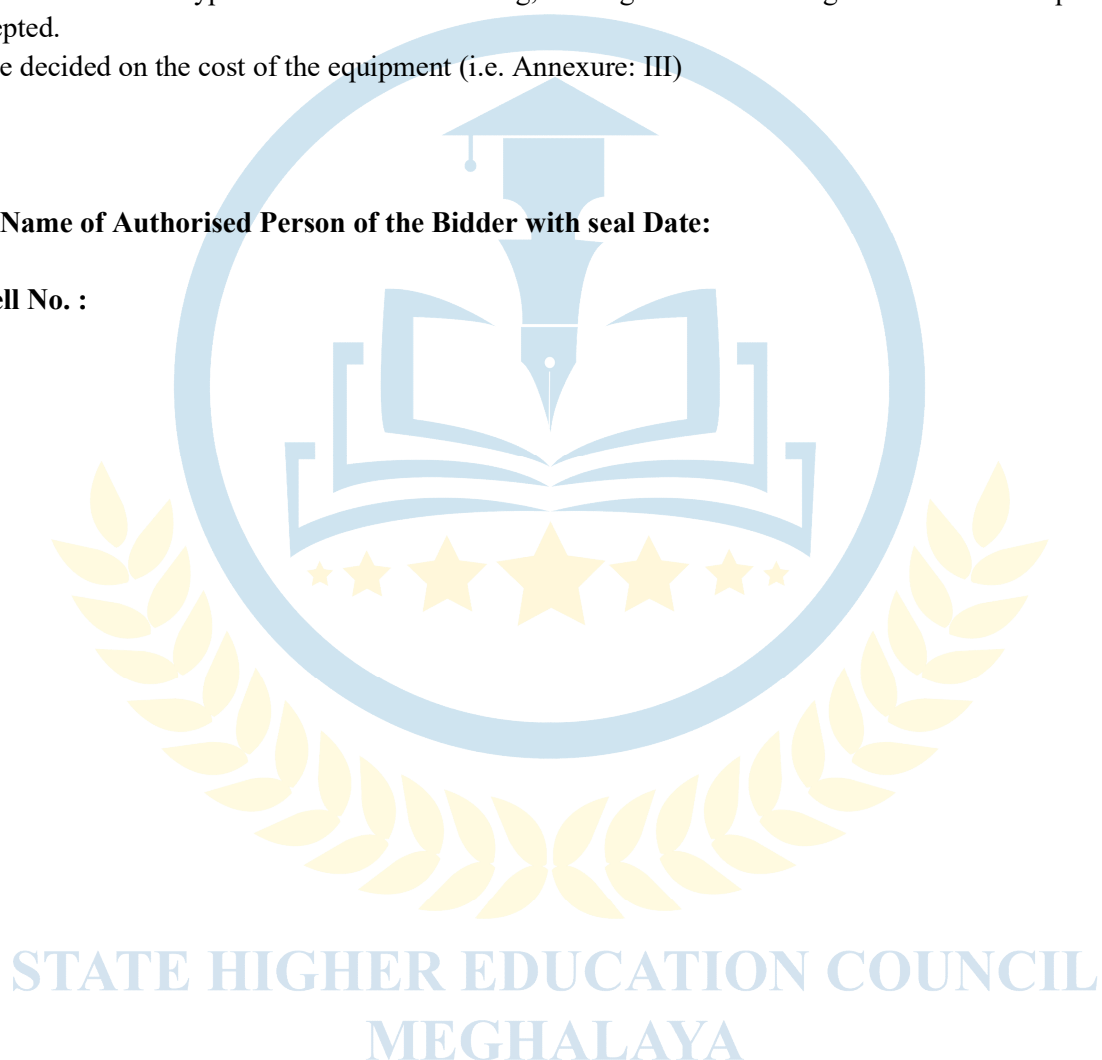
1. The rates should be inclusive of everything viz. Freight, Packing, Forwarding, Insurance, Transportation, loading/unloading, GST, as per requirement of equipment items indicated in the Annexure-II Detailed Technical Specification
2. The Excise Duty/Custom Duty, Custom Clearance Charges, Agency Commission etc. wherever applicable, should be indicated separately in the respective column in the above Financial Bid. Non-indication will denote that nothing will be charge as Custom Duty Custom Clearance/Agency Charge/Excise Duty etc.
3. The Bidder will quote firm rates inclusive of all taxes, fitting, fixing and transportation up to the College.
4. The Rates quoted against items on the Tender shall be without cutting, tampering and a Transparent Tape should be applied on the Quoted Rates.
5. Rates Quoted should be typed and free from Fluiding, Cutting and Overwriting. No handwritten quotations will be accepted.
6. L1 will be decided on the cost of the equipment (i.e. Annexure: III)

**Signature, Name of Authorised Person of the Bidder with seal Date:**

**Place:**

**Contact Cell No. :**

**Email ID :**





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**ANNEXURE IV**

**4. Letter of Undertaking:**

To,  
The Commissioner & Secretary to the Govt. of Meghalaya,  
State Higher Education Council,  
Shillong, Meghalaya

Tender No:  
Tender Date:

Sir / Madam,

1. I, Shri on behalf of \_\_\_\_\_ having its registered office at \_\_\_\_\_ and its branch office at \_\_\_\_\_ do hereby declare to comply with all the Terms and Conditions as specified in the ROC. The Rates quoted by me/us are valid and binding on me/us for acceptance for one year from the date of award of the contract to us.
2. We agree to the conditions of the tender under which the Earnest Money Deposit shall be forfeited by us.
3. The tender inviting authority has the right to accept or reject any or all the Tenders without assigning any reason thereof.
4. We understand all the Terms and Conditions of the Contract and bind myself/ourselves to abide by them.
5. I hereby furnish the following details as specified in the ROC:

**FIRM DETAILS**

**Firm Name:**

**Proprietorship / Entrepreneurship / Holding:**

**Company, Partnership Firm:**

**Name of Proprietor / Director / CEO / Others:**

**Address:**

**Telephone Number:**

**Fax Number:**

**Mobile Number:**

**Email Id:**

**BANK DETAILS**

**Bank Name:**

**Address:**

**Account Number:**

**IFSC Code:**

**NEFT Code:**

6. We hereby declare that as per the attached Affidavit, there is no vigilance / CBI or Court Case pending / Contemplated against us at the moment.
7. All information provided is True & Accurate. If at any time it is found that any information provided is proven false, I agree to the Cancellation / Termination of the Tender / Agreement leading up to blacklisting of the said firm under the Government of Meghalaya for a period of three years.

**SIGNATURE:**

**NAME & ADDRESS OF BIDDER:**

**DATE:**



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**ANNEXURE V**

**5. Declaration:**

(To be submitted by the bidder firm on non-judicial stamp paper of ` 10/- (Rupees Ten only) duly attested by Public Notary along with Technical Bid)

**AFFIDAVIT**

I, \_\_\_\_\_ s/d/o \_\_\_\_\_ r/o \_\_\_\_\_ in  
capacity of Proprietor/Partner(s)/Managing Director/Director/Authorized Signatory of \_\_\_\_\_ M/s  
\_\_\_\_\_ do hereby solemnly affirm and declare that:

1. I/we have read all terms and conditions of the Tender Document carefully and undertake to abide by them faithfully.
2. My/our organization does not have any legal suit/criminal case pending against it for violation of PF/ESI/MW Act or any other law.
3. My/our firm has not been blacklisted or debarred by any state or Central government organization.
4. My/our firm has not been involved in the supply of spurious Material and has not been penalized by SHEC, Shillong any state or Central government organization for misrepresentation or for adopting corrupt practices.
5. The information furnished in all parts of this Tender Document is accurate and true to the best of my knowledge.
6. My/our firm shall not pay any type of commission to any person in regards to this tender.
7. My/our firm will not place any other material in addition in any case to the order placed by the **SHEC, Shillong.**
8. I/we fully understand that in case of above certificate/declaration are found false, I/we shall be liable to any penalty as per terms & conditions including criminal/civil prosecution under law.

Signature

Date:

Place:

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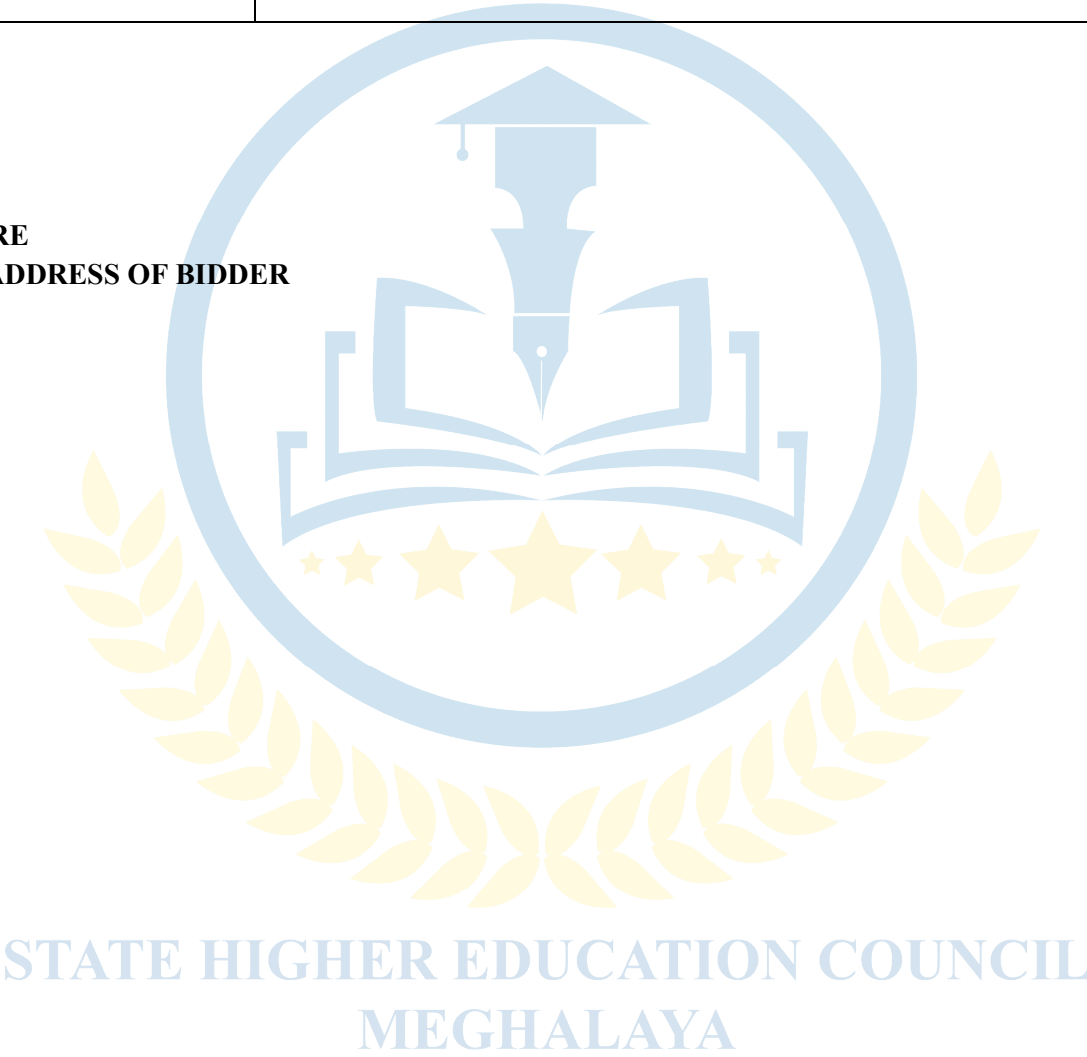
ANNEXURE VI

6. Income Tax Return:

- a) Name of the firm \_\_\_\_\_  
b) Address \_\_\_\_\_

<u>Financial Year</u>	<u>IT Returns (Attached/Not Attached)</u>
<u>2022-23</u>	
<u>2023-24</u>	
<u>2024-25</u>	

SIGNATURE  
NAME & ADDRESS OF BIDDER  
DATE





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ANNEXURE VII

7. Annual turnover statement of the bidder:

- a) Name of the firm \_\_\_\_\_  
b) Address \_\_\_\_\_  
c) Annual turnover for the last three years \_\_\_\_\_  
(In INR)

Financial year	Turnover ( . in Lakh)	Balance Sheet etc. Authenticated by Chartered Accountant	UDIN no
2022-23		Attached/Not Attached	
2023-24		Attached/Not Attached	
2024-25		Attached/Not Attached	

Seal & Signature of Chartered  
Accountant / Auditor  
Membership No.:

Date:

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**ANNEXURE VIII**

**8. Bid Security (EMD) Form:**

Whereas..... (Hereinafter called “the Bidder”) has submitted its bid dated.....for the supply of..... vide Tender No ..... dated..... KNOW ALL MEN by these presents that WE ..... having our office at .....(hereinafter called “the Bidder”) are bound unto The Commissioner & Secretary, State Higher Education Council, Meghalaya (hereinafter called “the Purchaser”) the sum of Rs..... vide DD no..... for which payment will and truly to be made of the said Purchaser, the Bidders binds itself, its successors and assigns by these present.

**THE CONDITIONS of the obligation are:**

1. If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid form OR
2. If the Bidder, having been notified of the acceptance of his bid by the Purchaser during the period of bid validity
  - (a) fails or refuses to execute the Contract, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand, the purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force as to the bidders of the Bid Document up to and including Ninety (90) days from date of opening the Tender and any demand in respect thereof should reach the Bidder not later than date to be specified.

**Signature of the Bidder.**

**Name**

**Signed in Capacity of**

**Full address of Office**

**Tel No. of Office**

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ANNEXURE IX

9. Performance Security(PSB) Form:

..... (Insert: Bank's Name and Address of Issuing Branch or Office)  
**Beneficiary:** ..... (Insert: name and Address of Purchaser or Commissioner & Secretary, State Higher Education Council, here in after called the SHEC,)  
Date: .....

PERFORMANCE GUARANTEE No: .....  
We have been informed that (insert: name of Supplier) has entered into Contract No. (Insert: reference no of the contract) dated ..... With you, for the supply of (Science Lab Equipment's).

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we (insert: name of bank) hereby irrevocably undertake to pay you a sum or sums not exceeding in total an amount of (insert: amount in figures) (.....) (insert: amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the supplier is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire no later than the ..... Day of ....., 2..... , and any demand for payment under it must be received by us at this office on or before that date.

\*\* The guarantor agrees to extension of this guarantee for a further period in response to the purchaser's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

Dated: \_\_\_\_\_  
For \_\_\_\_\_  
(Indicating the name of the Bank)

N.B. This guarantee should be issued on non-judicial stamped paper, stamped in accordance with the stamp act

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